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An Address.¹

By E. M. HUMPHERY, M.B., Ch.M. (Sydney),
President of the New South Wales Branch of the
British Medical Association.

FIRST of all I have to thank you for having done me the honour twelve months ago of electing me as your President for this year. It is with feelings of diffidence that I now take up the reins of office, for I am painfully aware of my many shortcomings; this year promises to be full of events of importance in the history of our Branch and I feel that a great responsibility has been entrusted to me to do justice to the records of only some of my predecessors, among whose names are makers of our history and traditions and some who have made the name of our country famous in the eyes of the world.

I can only hope that when I have finished my term of office you will not have been disappointed and will deem my name worthy of a place in the list.

Young as we are, still we are old enough to have our own traditions. It was only on small things at first that our British Empire was founded and once it was smaller than we are today.

With this annual meeting of our Branch of the British Medical Association there commences a new order of procedure. You who have felt it your duty to be present, will on this occasion have to listen to two presidential addresses. Hitherto it has been the custom for the retiring President to deliver an address as he vacated the chair. You have just listened to Dr. Brown Craig's address and with it ends the old *régime*. Your incoming President will now inaugurate the new order of things with another.

The New South Wales Branch has always aimed at conforming to the procedure of the Parent Body. The arrangement for the incoming President to address the members was adopted in May, 1928. Your Council came into line at our last annual meeting by appointing the President-Elect for this year and it now remains for me to complete the change. One of the most comforting features is that during his year of office the occupant of the chair will not be constantly faced with the nightmare of having to compile the annual address while trying to concentrate his efforts on his official duties, not to mention the possibility of the arrangement being a subtle scheme to give the members an opportunity of ascertaining what they might expect from him during the ensuing year.

The year 1930 is the fiftieth year of existence of the New South Wales Branch of the British Medical Association. It is customary to celebrate a jubilee in some fitting manner and what could be more so for this Branch than the opening of our new home, the magnificent building now nearing completion and so appropriately located at 135, Macquarie Street, opposite the Botanical Gardens, whence a clear view of its architectural beauties can be obtained, making

it one of the dominant features of Sydney's outline and itself holding a commanding view, never likely to be occluded, of the harbour, the pride of our city and envy of many others.

The month of October has been thought to be the most suitable for the celebrations; many attractions make it the most favoured time for visiting Sydney and it will afford an opportunity for our country members to join us in setting our fiftieth milestone with a ceremony befitting its importance.

The last fifty years have seen the greatest advances in every branch of science. Many of its problems have been solved, some previously regarded as impossible of solution, and the benefits to mankind have been incalculable. What, however, has been the effect on our minds? When Faraday, Harvey, Lister, Simpson, Stephenson and others of those pioneers made their discoveries, simple and elementary though they seem to us when compared with the achievements of today, the world was staggered. Truly never has the phrase "familiarity breeds contempt" been more applicable than today. Children grow up in an atmosphere laden with the wonders of the aeroplane, X rays, telephone, wireless and movie-talkie pictures, some of which were foretold with extraordinary accuracy by that author of our childhood's fiction, Jules Verne, and also many complicated medical and surgical procedures, not omitting a more than primitive knowledge of those problems of life which used to be so carefully guarded from them until years of discretion. They now accept all these most intricate and marvellous attainments as a matter of course and merely ask for the next.

Many of us will remember how typhoid used to be regarded as a scourge with which we would always have to put up, little dreaming how years of patient experiment and research were going to place in our hands the simple protection of inoculation. What is the attitude of the man in the street today? He is no longer amazed, but asks his doctor: "Why have you not found a cure for cancer?" And we feel that he almost holds our profession up to derision because as yet there is no answer for him. The time is gone when "the undiscovered country . . . puzzles the will and makes us rather bear those ills we have, than fly to others that we know not of."

What inventions and discoveries the next fifty years hold time alone will show. As more are made, bringing with them improvements in methods of research, one would imagine the field for investigation becoming smaller, but we shall always find that getting rid of one disease only makes way for another to advance and the constant change in manufacturing processes and other similar pursuits opens up avenues for fresh diseases or injuries.

Here, however, unlike the investigation of the older and more established diseases, we are in a more fortunate position and can nip them in the bud as it were, aiming with much more certainty at their prevention rather than having to treat them after they have become established. As an instance,

¹ Read at the Annual Meeting of the New South Wales Branch of the British Medical Association on March 20, 1930.

the installation of fast running machinery in factories has brought with it all kinds of injuries unknown in the days of manual work. These have been eliminated as far as possible by the installation of various guards and shields at the danger spots to prevent the occurrence of those injuries. With regard to sickness the great aim today is to prevent it by removal of the provoking cause or protect against it and so in time stamp out the particular disease.

The whole world is in a state of unrest in many ways and our profession cannot help being drawn into the maelstrom to some extent. There is a very great tendency to nationalize us or bring us down to a commercial basis in some way or other and more than once it has been said recently that when this comes about, all individual effort at investigation or research will wane. Is there need for any apprehension on this score? Will not the mantles of those great men of our profession who have gone before, continue to descend as sacred heirlooms and ever keep before us and our posterity those two small words "how" and "why" which ever urge and stimulate those who have taken up medicine as their calling to continue to be students from the beginning to the end of their careers?

Let me quote a few lines I once read and wrote down, but whose authorship I cannot recall:

As if out of the triumphant splendour of the sunrise a voice cried aloud that no endeavour is for ever lost, no hope entirely forlorn. Beyond the uttermost horizon of man's ideals, beyond all human attaining and achievement there is something else which requires an unceasing striving after good. However noble the conception, whatever the goal, there is no finality.

RETIRING REMARKS.¹

By F. BROWN CRAIG, M.B., Ch.M. (Sydney),
F.R.C.S. (Edinburgh),

*Retiring President of the New South Wales Branch
of the British Medical Association.*

At this general meeting a new order of proceedings comes into force. It has been the custom in the past for an address to be delivered by the President at the end of his year's work, but in future this address will be delivered when the new President comes into office. My successor, Dr. E. M. Humphery, will inaugurate this change and will address you when he takes up the position which I have occupied for the past year.

I wish here to express my thanks for the honour conferred on me by your electing me to this position. Now that my duties are almost complete, I can realize that the past year has been one full of important happenings to the Branch, both in respect to its internal organization and its relations with the Association, the other Branches and the public.

As you are all aware, Dr. J. Hunter was elected in June, 1929, to be Medical Secretary of the Branch. There is an ever increasing amount of work to be done by our staff and it was high time that Dr. R. H. Todd received more assistance and help in coping with the extra burden placed upon his shoulders by recent legislative acts. Dr. Hunter has thrown himself into his work with great energy and understanding. He is an acquisition to the Branch and a great help to the Council.

I should like to direct your attention to a few of the most important events of the year, details of which you will find in the printed report. Our staff and the Council have had to put up with considerable inconvenience owing to the limited space available in our temporary office in the Savings Bank Building. This state of affairs will be remedied, however, when in June of this year the B.M.A. House in Macquarie Street is ready for occupation. When the new building is nearing completion, members will realize that such a big undertaking has added considerably to the work of the Council in dealing with the details of planning, policy and finance.

Under the last heading, we are still in need of considerable support from individual members in the matter of debentures. Without architects' fees the cost of the completed building will be in the neighbourhood of £133,000. From our own capital, from mortgage and from debentures already taken up we can find £118,000, leaving a balance of £15,000. This amount we confidently look to members to defray by patriotically taking up more debentures according to their means, either of the £50 or £10 denominations.

The new quarters will comprise an assembly hall to accommodate two hundred people. There will be a library besides two committee rooms and ample space for the general and other offices. The letting of the remainder of the space as professional rooms is going on satisfactorily and in time will furnish us with an income which will provide a sinking fund and enable us to carry out the objects of the association in a proper manner.

In November last the *Public Hospitals Act* came into force and is being administered by the Hospitals Commission. The working of the new act will depend largely upon the regulations which the Commission will formulate. Up to the present no regulations have been issued, but the Chief Commissioner, Mr. R. J. Love, has granted an interview to members of Council on a number of occasions and has discussed with them matters of policy in regard to the classification of hospitals and hospital patients, also the establishment of community hospitals and hospital finance. The Commissioner realizes the importance of securing the cooperation of members of our profession. He has expressed appreciation of the help the Hospital Committee of the Council has been able to afford in the preliminary work which is necessary if the act is to be effectively administered.

¹Read at the annual meeting of the New South Wales Branch of the British Medical Association on March 20, 1929.

The Commissioner has been engaged in making a survey of all the hospitals of the State and on his tours he has met members of the local associations and the honorary medical staffs of country hospitals. He has discussed with them matters of common interest between the Commission and our members.

As a result of this new policy the fact emerges that hospitals are no longer merely charitable institutions for the treatment of the destitute, but are now centres at which a big proportion of the community receives services for which it is able to pay. This change in the scope of hospital treatment must of necessity mean a change in the system of honorary medical service and it is with the solution of this problem that the Council is at present concerned. May I say that as the Commission has met our Association in a fair and reasonable spirit, it should be our settled policy to back up their efforts in bringing order out of the chaos which previously existed.

In an amendment of the 1926-1927 *Workers' Compensation Act*, passed in November last, the section relating to medical benefits has been deleted and a new section substituted. It defines what is meant by medical treatment. Differences in interpretation of the act still occur and disputes with insurers have arisen on certain points. In settling these disputes Dr. Hunter by his personal handling of matters with the insurance companies has been able to give the Council great assistance in securing a satisfactory settlement. It is important to note that the arrangement whereby friendly society lodge members are no longer entitled to receive treatment as injured workers under the act from the lodge medical officer has been accepted by the insurers. The medical attendant can now claim his fees from the insurer in the same way as if the patient were not a friendly society lodge member.

The agreement between the Council and representatives of the licensed insurers made on October 4, 1927, has worked on the whole in a satisfactory manner to those members immediately concerned. However, it was an understanding at the time of the adoption of Schedule D that future conferences should be held in order to modify the schedule in details where anomalies were found to occur. Sufficient data have now accumulated with the Council upon which to base certain alterations which will make the position of the medical officer more satisfactory and avoid disputes arising with insurers in the matter of just payment for his services. With this end in view a meeting of delegates of local associations with the Council has been arranged for April 24, when amendments will be discussed and alterations agreed upon before another conference is asked for with representatives of the insurers.

The attitude of insurance medical referees has caused dissatisfaction to some general practitioners. It must be remembered, however, that the insurer has a perfect right under

the act to have the injured worker examined from time to time by an impartial medical man, provided, of course, that he is paid by the insurer. Much less difficulty would arise in this respect if the medical referee would communicate with the injured worker's medical attendant to ascertain his point of view, as is done generally by consultants.

The matter of greatest interest during the year was the Third Session of the Australasian Medical Congress (British Medical Association) which was held from September 2 to September 7, 1929.

The total membership was 951 to which New South Wales contributed 601. The meeting was a conspicuous success in every department and the Branch is to be congratulated upon its accomplishment of a notable piece of organization. This result was achieved by the excellent team work of the officials of Congress and the members of the various committees. The credit, however, of coordinating and directing all this immense amount of detailed work must be given to the President, Dr. G. H. Abbott, and the joint Honorary Secretaries, Dr. Arthur Palmer and Dr. T. W. Lipscomb. I take this opportunity of placing on record the appreciation of the Council and the members for the splendid effort which these three gentlemen carried to such a successful conclusion.

We were particularly fortunate in having as the representative of the parent association such a distinguished member of the profession as Sir Ewen Maclean, the immediate Past President of the Association. By his presence and his dignified utterances he added greatly to the prestige of Congress and did a great service to the profession in Australia.

Before concluding I will take this opportunity of referring to the sudden death of one of our distinguished members. After a short acute illness Dr. H. W. Armit died on the twelfth instant. The late Dr. Armit's services to the profession as Editor of THE MEDICAL JOURNAL OF AUSTRALIA are recognized throughout the Commonwealth. His standards were of the highest, both in his personal relations with the profession and in his direction of the policy of the journal. When he entered upon his duties in 1914, the journal which he edited succeeded the *Australasian Medical Gazette* of New South Wales and the *Australian Medical Journal* of Victoria, and became the journal of all the Branches. The setting up and printing of THE MEDICAL JOURNAL OF AUSTRALIA was at first done by contract. As the journal grew, in response to Armit's efforts linotype machines were installed in the old Branch building and the setting up of the journal was carried out by his own operators, only the printing being done by contract. In 1924 a big step was taken by The Australasian Medical Publishing Company, Limited, when they erected The Printing House, at Seamer Street, Glebe, and equipped it with all the machinery for setting up and printing general and scientific copy of the most intricate nature. As Editor and Manager for The Australasian Medical Publishing

Company, Limited, Armit never spared himself. He was an indefatigable worker and seldom allowed himself a holiday.

His familiar figure at meetings of Council and ordinary meetings will be greatly missed. The Council extends its deep sympathy to Mrs. Armit and her daughter at their sad loss.

SOME REMARKS ON AMENTIA.

By GREY EWAN, B.Sc., M.B., Ch.M., Diplomate in Psychiatry (Sydney).

*Medical Superintendent, Mental Hospital, Newcastle;
Honorary Physician at the Neurological and
Psychiatric Clinic, Newcastle General
Hospital, New South Wales.*

INTEREST in the subject of mental deficiency apart from mental disorder proper is awakened in the community from time to time by various educational, psychological or kindred associations and it is probable that at no distant date legislation will be enacted by one or more of the Australian parliaments to deal effectively with individuals falling into this category and define certain lines of action for dealing with the social and economic problems resulting therefrom.

Individuals suffering from one or other form of mental deficiency (amentia) together with those the subject of mental disorder proper (psychoses) in New South Wales are dealt with by the administrative machinery of the *Lunacy Act*, 1898, and are defined therein as "incapable persons," that is, incapable through mental infirmity arising from disease or age of managing his or her affairs, or "insane person," that is, any person found or declared whether by inquisition or under any lunacy act to be insane or of unsound mind and incapable of managing himself or his affairs. Thus aments and psychotics have come to be treated under the same authority and often in one and the same institution, although the undesirable features of which may be obvious, apart from the fact that the treatment, education and discipline of the former is carried out on totally different lines from that of the mentally sick. This appears to be the rule throughout the States of Australia with the exception of Tasmania whose *Mental Deficiency Act* makes special provision for the treatment and care of its aments.

Tredgold, an English authority,⁽¹⁾ defines mental deficiency or amentia as:

a state of restricted potentiality for or arrest of cerebral development in consequence of which the person affected is incapable at maturity of so adapting himself to his environment or to the requirements of the community as to maintain existence independently of supervision or external support.

For practical purposes patients are placed in three main groups, namely, idiots, imbeciles and feeble-minded, though each group may pass imperceptibly into the other and the latter into normality.

The introduction, apart from social capacity, of standardized intelligence tests of recent years has greatly assisted in determining those of subnormal or borderline mentality. Apart from these major groupings interesting clinical types are recognizable with more or less definite aetiology, symptomatology and pathological features. The classification or grading of mental defectives which purports to reveal the level of mental functioning according to the most modern conceptions of mental defect or satisfying the requirements of a scientific mental scale in the true sense of the term, is a task of no mean order and this is rendered so by the necessity of taking cognizance of so many psychological factors in domains other than pure intelligence, such as the will, the emotions, personality traits, constitutional or inherent biological factors, the latter sometimes appearing as probable biological variants with or without compensatory mechanisms. Mental defect is thus to a large extent relative in its manifestations and the often accompanying social inadequacy may be explainable partly by degrees of temperamental instability apart from any more or less actual intellectual defect.

The interest and activities of educational and charitable associations are mostly directed to problems of prevention and those of a eugenic nature; from time to time theoretical arguments are advanced to champion the cause of sterilization. While admiring the enthusiasm of the advocates of such practice which in a few rare instances might be considered justifiable, one cannot allow such enthusiasm to overstep the bounds of reason or practical experience. "The sterilization of the unfit," whatsoever the definition or authority, medical or legal, set up to establish such a class, in the manner advocated at the present day will not eliminate vice, crime, antisocial behaviour or personality disorders from such individuals; their detection, supervision, care and treatment will still be a State obligation and any advantages to be gained, even from the point of view of lack of procreation, may be conserved as under the present system of adequate segregation in special institutions or colonies. The popular conception of prevention of the unfit by sterilization is based on insufficient data of the many factors underlying the causation or aetiology of mental deficiency. Although the difficulty of obtaining accurate histories of mental defect or psychopathy in the families of mental defectives is notorious, one occasionally meets with patients in whom one may be tolerably satisfied that no hereditary taint existed for several generations past; the condition of such patients does not by any means conform to any particular clinical entity or group. This also applies to isolated secondary signs or manifestations, such as varieties of speech defects or congenital auditory imperception which may be explainable as inherent biological variations. If such is the case, it seems likely that these conditions from the apparent spontaneity of their nature will be produced in the community from time to time irrespective of eugenicists and

sterilists, unless perhaps the true factors are revealed by scientific research into the antenatal causes and conditions as well as the ultimate acceptance and application by the community of the fundamental laws and principles of mental hygiene throughout the whole decades of life.

The foregoing remarks are merely to serve as an introduction to a description of cases of mental deficiency representing fairly well defined clinical groups and to stimulate an interest in the social and economic aspect of mental deficiency apart from the purely medical or psychological approach, but I do not intend to digress further. The following cases formed the basis of a clinical demonstration held at the Mental Hospital, Newcastle, on October 22, 1929, with Professor W. S. Dawson in the chair, primarily on behalf of candidates for the diploma in psychiatry at the University of Sydney. A brief description was given of each clinical group before particular features applicable to individual patients were described. Certain features pertaining to Cases 1, 2, 7, 8 and 15 have been published by Dr. John Bostock in *THE MEDICAL JOURNAL OF AUSTRALIA*,⁽²⁾⁽⁸⁾ to which reference is made, and these have been included to complete a clinical series of mental deficiency of such a representative nature and of such interest as to seem worthy of publication.

ÆTIOLOGY OF AMENTIA.

On examining the case histories of patients with a view to determining the main ætiological factors concerned in each variety of amentia one finds scattered throughout them various factors such as neuropathic inheritance, alcoholism, tuberculosis, syphilis, consanguinity, age of parents, abnormalities of labour and even maternal impressions during the period of gestation are often resurrected by the self-respecting mother to explain the stigma of mental or physical defect in her offspring.

I do not intend to labour you with examples of each of these ætiological factors, but shall content myself with demonstrating a couple of cases to represent the group.

CASE 1, T.R.B. The first patient is a male, aged eight, and admitted on July 12, 1924. He is a pleasant little mongolian imbecile, although at times mischievous and irascible. The father was twenty-six years of age, a labourer, and the first child of two; he is deaf. The maternal grandfather is alive and healthy, aged seventy-three years. He was an engineer and is steady. The paternal grandfather is alive and healthy, aged fifty years; he is a miner and is steady. The mother is twenty-six years of age, an epileptic and defective. She is the fifteenth of sixteen children, nine of whom were reared. The maternal grandmother is alive and healthy, aged sixty-nine years. The paternal grandmother died in childbirth. The patient has one brother a mongolian imbecile and this fact is worthy of note, as it is exceedingly rare for two mongols to occur in the one family. One sister is alive and healthy. The patient was the second child, a full-time infant weighing between 3.2 and 3.6 kilograms (seven and eight pounds). The delivery was instrumental. Whilst pregnant, the mother was free from epileptic seizures and commenced to have fits again soon after the infant's birth. The dentition followed at the usual age; he walked at sixteen months.

CASE 2, S.F. The second patient is a male, thirteen years of age, and was admitted on May 22, 1923. His condition exemplifies the effect of alcoholism, on a basis of neuropathy as well as consanguinity, a certainly unenviable combination, although I would like to point out that consanguinity alone plays a very minor part in the ætiology of amentia, provided the stock is sound, popular belief to the contrary. The father is alive and healthy, a labourer; he is steady. The mother is alive and healthy and is described as simple. They are first cousins. The paternal grandfather is an inebriate. A paternal cousin is in a mental hospital. A maternal cousin is an epileptic. The patient is the seventh in the family; he has one brother alive and well, two sisters alive and well; five children were still-born.

Just before the pregnancy both parents suffered with enteric fever. The patient was a full-time infant; the birth was difficult, a breech presentation with a large infant. Dentition followed at the usual time, but he has not been able to walk. He is now an undersized, helpless idiot, of very low intelligence and incapable of speech; he walks with peculiar frog-like gait on all fours.

Amentia Simplex.

CASE 3, M.G., a female patient, aged seven, was admitted on August 31, 1926. The father is thirty-three years of age, a labourer. He was shell-shocked at the war and suffered from fits on his return. He is bad tempered and nearly always out of work; he is temperate. The mother is twenty-eight years of age, says that she has splendid health, but later speaks of nerves; she looks tired and worried. She proposes to have a sterilizing operation.

A paternal aunt was in the Mental Hospital, Parramatta. The maternal grandfather died of gout, an inebriate. He incestuously assaulted his own daughter, the patient's mother resulting from the union. The patient has one brother, aged two and a half years, in this hospital with simple amentia. One brother died of gastro-enteritis at six months. One sister was in hospital with gastro-enteritis. This patient's condition belongs to the simple form of amentia with a moderately high intelligence quotient, namely, 64, corresponding to a mental age of four and a half. She appears fortunate to have escaped so lightly from the hereditary blight from which she has emerged. She exhibits no obvious physical stigmata, is a bright, playful little girl with character traits as shown on her school chart. She is one of a group we have at this hospital the members of which are afforded an opportunity at a special *Kindergarten* school where efforts are made at education and attempts to retrieve any latent potentialities they might possess.

Mongolism.

The subjects of the mongol group comprise between 5% and 10% of all aments. The cause of the condition is still obscure, although much evidence is forthcoming to support the theory of exhaustive, worn-out or immature reproductive powers on the part of the mother, although many authorities deny such an ætiology and advance in turn specific glandular or nutritional defects, syphilis, pressure on the fœtus *in utero* by an abnormally small or tight amniotic sac and so on. A more or less definite pathology has been described, consisting chiefly of diminution in the size of the brain with a cortical aplasia, but without any characteristic abnormality of glandular or other bodily structures.

Attention has been called to the resemblance these patients bear to one another, so much so that they might be taken for members of the same family and you will see this aptly exemplified in these two little patients here standing side by side. This is a not unimportant observation bearing on the ætiology of the condition. Tredgold stated that:

Dr. Sutherland in one of the best accounts we have of mongolism as seen in the early years of life argues from this that the cause is more likely to be particular than general, "general causes," such as parental alcoholism, nervous disease and hereditary neuropathy, being unlikely to produce such an exact type of disease as exists in mongolism.⁽³⁾

This variety is often compared and contrasted with cretinism and I regret I have been unable to present to you this afternoon a case of the latter for this purpose. At the close of last year I made a detailed examination of over 250 imbeciles and idiots for physical stigmata at the Mental Hospital, Stockton, and neither among these nor an equivalent number at this institution have I been able to discover a child with cretinism. The fact that in over 500 mental defectives in the northern hospitals of this State no case of cretinism exists is worthy of note and perhaps points to the conclusion that these conditions are being more readily recognized by the general practitioner and afforded early treatment or that the occurrence of them in New South Wales is rare. I shall content myself with giving a brief *résumé* of the family and personal history of one only of these patients.

CASE 4. I.M.F., a female, aged six years, was admitted on February 20, 1929. The father is alive and well, a butcher. He is steady. His age is forty-four. The mother is alive and well, aged forty-five. One brother is alive and healthy, aged twenty-one, and is said to be intelligent. Two sisters are alive and healthy, aged eighteen and ten years respectively. They also are intelligent. The rest of the family history is clear.

The patient is the youngest of four. The mother had to lie up from the fourth month of pregnancy on account of threatened miscarriage. The birth was normal at full term and not instrumental. The baby was apnoeic at birth. She had convulsions for the first three days. She was breast fed up to four months. She had nearly all her teeth at twelve months, but they decayed early. She was on the bottle till she was about four and a half years old. She could not sit up till she was three. She walked at four. She has had no fits since she was three days of age.

She is at present a smiling, pleasant little mongol; she understands a good deal of what is said to her, notices her surroundings, but does not speak. She can use a spoon clumsily, but requires to be dressed and undressed.

The following characteristics you will see exemplified in one or the other of these two patients.

The mongolian variety of amentia is usually easily distinguishable because of the facial resemblance to the Mongolian race, the characteristic features being the obliquity of the palpebral fissures, the squat, round face with high coloured cheeks and button-shaped nose with flattened bridge. The tongue is usually large, marked by hypertrophied papillae and a series of irregular transverse fissures. This condition of the tongue, when present, is often regarded as pathognomonic, but may not develop for a few months or years after birth. The ears are usually small and rounded with a badly developed lobule. The teeth are often ill formed and prone to decay and the palate high, narrow and arched. The skull is usually small, rounded and diminished in its antero-posterior aspect, the face and occiput tending to be flattened, but the cranial conformation is quite distinct, as you will see later, from that

of the microcephalics proper and oxycephalics, though all three have a reduced circumference. These patients are usually of diminished stature. The hands are broad and the fingers are usually thick for the size of the hand; the little fingers and thumbs are much shorter than normal. The little finger is sometimes incurved and extends no further than the middle of the second phalanx, whereas normally it usually ends opposite the last joint of the ring finger. Another characteristic feature often found in the palm of the hand is the presence of only one well marked furrow which runs transversely, instead of the usual three lines, the so-called simian line resembling that in the chimpanzee. The feet are also broad and spatulate and you will also see in both these little patients another common characteristic, namely, the large cleft between the big toe and the next one. The skin is rough and dry with often a downy growth of hair on the forehead and cheeks. The abdomen is usually large and herniae are frequently present. The expression is usually vivacious, observant and imitative. The majority of these patients are prone to suffer from chronic inflammatory conditions of the mucous surfaces, blepharitis, rhinitis, bronchitis and so on. Their circulation is also generally poor and there are sometimes congenital cardiac lesions.

Mentally these patients look bright, are of happy disposition, very affectionate and readily pleased and they have a remarkable sense of rhythm and love of music. The majority belong to the imbecile group of mental defect.

Hydrocephalic Amentia.

The term hydrocephalic amentia is restricted to those forms in which the amentia is secondary to this lesion. By hydrocephalus is to be understood a uniform enlargement of the cavity of the skull by fluid within the cerebral ventricles, by which it tends to become more globular. The accumulation of cerebro-spinal fluid within the ventricles may amount to several litres. In consequence of the pressure of this fluid the brain tissue adjacent to the ventricles is gradually thinned and destroyed and in extreme forms may be reduced to a fraction of a centimetre, so that the hemispheres resemble a huge cyst. The parts least affected are the cerebellum and basal ganglia. There are two main varieties, those due to active and steadily progressive disease in which the patients are acutely ill and bedridden with wasted bodies, convulsions and severe paralysis and possibly blind or deaf or both, and those usually inmates of special institutions, such as the one you are visiting today, in whom the hydrocephalus is either increasing very slowly or has undergone spontaneous arrest. In these patients the mental deficiency varies from a mild degree of feeble-mindedness to pronounced imbecility. Owing to their muscular weakness, movements are clumsy and badly coordinated and in some patients severe paralysis may be present; the legs are more frequently and more severely involved than the arms. Strabismus is sometimes

present and in some of the more severely affected patients nystagmus occurs. The hydrocephalic skull is uniformly enlarged in all directions and thus tends to assume a globular shape. The forehead is high and projecting and the sutures often widely separated, but when the condition is arrested, these become filled in with Wormian bones and the component parts of the cranium become firmly united. The scalp is thinned and often marked by large and prominent veins. The excessive size of the cranium in conjunction with the small face causes the head as seen from the front to have a very characteristic conformation resembling an inverted pyramid, thereby producing a curiously top-heavy appearance. The circumference varies from a little above the normal to as much as seventy-six centimetres (thirty inches) or more, but there is no constant relationship between the size of the skull and the degree of mental impairment. The prognosis depends on whether the disease is stationary or slowly progressing. The common morbid changes leading to hydrocephalus are tumours in the cerebellum, *pons* or tentorium, chronic inflammation about the medulla and cerebellum leading to matting and adhesions most commonly the result of cerebrospinal or posterior-basic meningitis, sometimes of congenital syphilis and lastly congenital malformation.

CASE 5, N.H. The patient, a male, now aged thirteen years, was admitted on May 24, 1926. He is the third born of a family of three; the others are well. The family history is good. He was a full-term infant; the labour was fairly rapid and not instrumental. The head was first noticed to be abnormal at about the age of ten months. A history is given of gastro-enteritis when the boy was one month old. He is said to have been very ill at this time; he was semiconscious, but it was denied that the condition was meningitis.

The patient is said to have fallen on the left side of his head at the age of four years; he was unconscious for one and a half years on and off, sometimes ten days at a stretch. He has had measles, chicken pox and whooping cough. On admission he could say his own name only in a brief manner; the only other remark that he made when investigated was that the tuning fork was music. He frequently smiles fatuously, but is usually silent and pensive and he is quite indifferent to his surroundings. As a rule when questioned he gazes at one in a stolid, helpless way and makes no attempt to reply or merely nods his head, his most expressive movement being a wink. His mental age is approximately three. No reaction was obtained to the Wassermann test with blood. Physically he is helpless, faulty and requires to be fed. The cranial circumference is seventy-two centimetres (twenty-six and a half inches); the skull is typically hydrocephalic.

The deep reflexes are less active of late owing to the prolonged spasticity and chronic contracture. There is a right hemiplegia with right ankle clonus and a few clonic jerks on the left side. On the right side Babinski's phenomenon can be elicited and there is spasticity of both right limbs.

Microcephalic Amentia.

In microcephalic amentia the mental defect is associated with extreme smallness of the head or with a head with a circumference at least less than forty-three centimetres (seventeen inches). They are usually easily recognized, but the extreme cases are not common. The diminution is in the size of

the calvarium and not the base of the skull, so that a characteristic pear-like shape of the face is produced, the narrow forehead contrasting with the wider face below. The recession of the frontal region, flattening of the occipital region and receding chin give the patients a characteristic bird-like appearance; particularly is this so in the patient before you, as she frequently holds her head forwards, downwards and slightly to one side when stimulated by the instinct of curiosity, thus making the resemblance all the more striking. The stature is also diminished and few of these patients grow more than 152 centimetres (five feet) in height. These patients are vivacious in manner, exhibit a restless activity, are curious, imitative and have fairly quick powers of observation. After a certain acquaintance with institutional discipline and routine these patients become quite amenable, interesting in their play and duties and of an affectionate disposition.

It was at one time considered that the condition was due to a premature synostosis of the cranium and later to an atavistic variation, but it is now recognized that it represents merely a developmental arrest perhaps of a grosser type than that obtaining in other forms of amentia.

Pathologically there is a general hypoplasia of the cerebral hemispheres, the cerebrum being extremely small, the posterior lobes of the cerebrum not covering the cerebellum, the cerebral convolutions simple in pattern and microgyric. Although there is usually present a defect of intelligence amounting to idiocy, the degree of intelligence varies and bears no constant relationship to the measurement of the head.

CASE 6, G.S., a female patient, aged fourteen years, was admitted on July 7, 1920. The family history has not been ascertainable. You will have already observed present in this patient the characteristic features of the condition just described. You will see that she has a convergent strabismus. Her skull circumference measures only 35.5 centimetres (fourteen inches). She cannot talk and is a restless little bird-like caricature of humanity, hopping about, mimicking all and sundry, making grimaces and is of a very low grade of idiocy.

Acrocephaly with Associated Syndactylism.

CASE 7, Z.M. The first patient with acrocephaly and syndactylism whom I wish to demonstrate to you, was admitted on May 26, 1921. She is now fourteen years of age. The chief points of interest in her history are as follows. The first parental pregnancy resulted in a girl, apparently healthy; the second pregnancy resulted in twins; both died of wasting in early infancy; the third pregnancy resulted in the patient; the fourth pregnancy terminated in a miscarriage; the fifth pregnancy resulted in a still-born child at seven months. When the mother of the patient was three and a half months pregnant, her sister broke her arm and this greatly upset the mother and she suffered a threatened miscarriage. The labour was difficult, possibly on account of hydramnios. The mother was given so-called "twilight sleep," but forceps were not applied. The child weighed four kilograms (nine pounds) at birth. It had a big head.

The most characteristic feature of the condition is the peculiar deformity of the skull described as steeple-shaped or sugar loaf skull associated with exophthalmos and more or less defect of vision.

The skull will be seen to be abnormally high in the frontal region from which it rises to a more or less sharp point at the vertex, and there is a flattening of the forehead which is due to lessened development of the supraorbital ridges and frontal eminences. The condition is said to be brought about by premature ossification of the sutures, especially the coronal and frontal and shortening of the skull base; a pattern of peculiar rounded digital markings resembling impressions of the finger tips can be observed in the skiagram.

The palpebral fissures slant downwards and with this there is definite exophthalmos. Divergent strabismus and nystagmus are said to be not infrequent, but this patient has no evidence of them; the fundi are normal, there is no refractive error and the pupils are equal and active.

Frequently in the less severe forms there is no impairment of intelligence, indeed the mental endowment may be beyond the average, but the mental status of the patients described in the literature to date varies considerably.

In this particular girl there is definite impairment, as revealed by an intelligence quotient of 58, corresponding to a mental age of seven years and eight months. She is a quiet, obedient, pleasant and good-natured girl and is clever at manual work, despite her deformities. The associated syndactylism is interesting. In the right hand the thumb is large and ill formed; the four fingers are fused, the phalanges being joined by thick webs of skin and bony union between the terminal phalanges. In the left hand the thumb and forefinger are separate, the next two fingers joined by thick webs of skin and apparently absence of the little digit. A surgical attempt was made to separate the digits in this patient's left hand and this accounts for the partial separation of the first finger. The right foot is similar to the right hand, with fusion of the lateral toes, and the left foot shows the same arrangement. There is a moderate degree of exophthalmos present in this patient. The skiagrams of her skull show the characteristic digitation and thickening in the bones.

CASE 8, M.S. This second girl suffering from the same condition was admitted in December, 1910, and is now twenty-two years of age.

Her cranial measurements are characteristic of the condition. She has a refractive error (gross myopic) and a divergent strabismus of the left eye, features frequently associated with the condition. She also has had a chronic marginal blepharitis, but the fundi are normal; exophthalmos is quite evident. Her blood reacts to the Wassermann test. This patient is also a good-natured, happy, placid and contented patient, but has a much greater impairment of intelligence than the previous patient and also has a similar condition of associated syndactylism of the hands and feet. The thumbs are free in each hand, misshapen and ill-formed and the fusion is similar to that described in the first case. The deformity in the feet in this patient is similar in each foot, but of a still more gross degree.

The skiagrams of her skull demonstrate the thickening and digital markings (see accompanying figure).

Achondroplasia with Micromelia.

Achondroplasia with micromelia consists chiefly in a defective foetal development of the bones of the extremities with comparatively normal development in the other tissues of the body.

CASE 9. M.C. was admitted on June 5, 1925. Her present age is six. Her mental age is two years and eight months, equivalent to an intelligence quotient of 47. The skull is seen to be enlarged, in fact in this patient it is hydrocephalic with depression of the nose, thick lips and

prognathism. There is present the characteristic shortening of the proximal portions of the limbs, the arm and the thigh with exaggerated curvature of the bones. The trunk is of normal length and thus appears altogether out of proportion to the stunted limbs. The hands are broad and short, the fingers are nearly all of the same length and radiate slightly, spoke-like with a tendency to form the trident hand. As the child stands, the buttocks are prominent. There is a lordosis. This and the prominent abdomen are quite usual. This child is 85.5 centimetres (33.25 inches) in height and her cranial circumference is 57.2 centimetres (22.5 inches).

Apart from the stunted growth these children are comparatively healthy. There is no actual rachitic change in the bones. The striking feature is the relatively large size of the upper and lower epiphyses of the long bones as compared with the stunted shafts. The intelligence of these little patients is frequently about the average or slightly below and they are quite vivacious. The condition has no special tendency to shorten life. The outlook as regards growth in stature is bad; the height in adult life is not likely to exceed 127 centimetres (four and a half feet).

This little patient, as will be seen from her character chart, is bright, friendly, obedient and clean and exhibits some adaptability and constructiveness.

CASE 10. The second patient is also suffering from the same condition.

Cerebral Palsies.

The next group comprises examples of the cerebral palsies. The first patient of this group has infantile hemiplegia. In this condition the hemiplegia is permanent, but the lesion is not progressive, although it is responsible for a legacy of permanently damaged nerve elements. The condition is sometimes congenital, but more often acquired and appearing usually within the first three years. The onset of the paralysis has been closely related to the specific fevers. There is usually an acute onset and the first symptom is often a convulsion or a series of convulsions. There may be feverishness and as the temperature subsides, one or other side may be found paretic or definitely paralysed. There may be ultimately some moderation in the degree of the paralysis and the arm generally exhibits signs of major involvement. In some patients restoration of function occurs to such an extent that difficulty may be experienced in detecting the hemiplegic distribution of the weakness remaining. Some degree of aphasia is also often met with in these cases and not necessarily restricted to a right-sided involvement. A certain degree of mental defect is a usual accompaniment, but we do not encounter the severer grades of imbecility or idiocy you will see demonstrated in the subsequent two cases of spastic diplegia. As the child grows older there is an ever-present tendency to epileptiform convulsions. The present case serves to demonstrate this condition.

CASE 11. G.M.L., a female patient, aged twelve years, was admitted on May 21, 1925. She was the first child in the family. She had been a breast-fed infant and had been described as a good baby. Dentition occurred at the normal age. She walked at twelve months and was quite well until two years of age. One day she became feverish and became stiff on the right side and had fits for about nine hours. She was very much paralysed for about a month, but was gradually able to walk. She suffered from fits at infrequent intervals until two years later, when she suffered from a series of seizures with loss of speech for two months. Speech gradually returned, but not so good as formerly. She was subject to infrequent epileptiform seizures up to the end of 1927, but has been

free of attacks since up till the present date. There is now paresis of the right arm and leg with paralytic *talipes equino-varus*. The arm is carried across the body, flexed at the elbow and wrist joints, the fingers more or less contracted over the palm with athetoid type of movements. There is a tendency to drag the right leg and foot when walking. She has a mental age of approximately four and although she has been tried at the *Kindergarten* school, she has made very little progress. She is a happy, babyish little imbecile, but needs a good deal of assistance.

The next case in this group is one of spastic diplegia due to trauma at birth. These conditions in contradistinction to the previous form almost always date from birth and there is usually a history of difficult labour, perhaps instrumental, often with a considerable degree of asphyxia. The extent of the paralysis indicates the extent of the cerebral lesion; many of the patients are first born children. In the next patient you will see the same condition due to congenital syphilis. The presence of various manifestations suggests that congenital syphilis as in infantile hemiplegia may play a more important part in these conditions than the history might suggest. There is weakness and spastic rigidity of all the limbs and the rigidity is sometimes increased by any voluntary effort or disturbance of the child. In the severer cases like the one before you, the child is unable to sit up; both arms are more or less rigid with occasional increase of spasm and jerky, uncontrolled movements, the wrists flexed and the fingers closed over the firmly adducted thumb. At the same time the legs are rigidly extended and the toes strongly pointed, often with inversion of the foot and adductor spasm of the thighs, so that the legs may actually cross one another at the knees or just below and in some patients there is spasm of the facial muscles. The rigidity and lack of muscular control result in clumsy movements which are rendered ineffectual by a coarse jactitation or choreiform irregularity. The tendon jerks are exaggerated, but extreme rigidity often renders it difficult to elicit responses at all and extensor reflexes are sometimes found which point to secondary degenerative changes in the spinal cord. In these patients idiocy is the rule and generally of an extreme degree; if speech is acquired, articulation may be very indistinct or practically unintelligible.

CASE 12. W. McC., a boy, aged seven years, was admitted on August 17, 1926. The mother was eighteen years of age at the child's birth and a *primipara*; he was a full-time infant, a small child. The labour was prolonged; when the child was born, the head was shaped like a beak on the top, evidently the result of pressure. The child was unable to sit up or take his food like another infant; it did not show any signs of intelligence. Two other children were healthy. The child exhibits the characteristic features of the condition just described with also a paresis of the seventh cranial nerve on the right side and is in a condition of helpless idiocy with no sign of intelligence.

The next case belonging to the same group is one of spastic diplegia due to syphilis. In these cases one often cannot express an opinion as to the particular nature of the lesion and one is forced to be content with the conception of a syphilitic origin for the condition. It is possible some forms

may be due to a localized meningitis or a generally distributed syphilitic inflammation of nervous tissue or still further generalized syphilitic involvement of the cerebral vessels interfering with the nutrition of the brain as a whole. The morbid anatomist is of little help to us in these conditions, as autopsy reports reveal merely secondary degenerative processes or terminal conditions which throw little light on the original cause of the diplegia.

CASE 13. K.C., a female, aged eight years, was admitted on August 21, 1923. The patient is the fourth child of a family of four. There is a history of a miscarriage prior to the birth of the patient. The mother had a full-time, easy confinement. The baby was breast fed for four months. The patient was brought to hospital as she was unable to sit up and was not developing normally. On admission she was found to be quite helpless, mentally and physically. She was unable to speak, sit up or feed herself and has remained so. The blood serum yielded a reaction to the Wassermann test. The mental status is one of advanced idiocy. She has become much stronger lately and is able to be supported in a chair, although she is still faulty. She has to be hand fed and is generally helpless. She exhibits the characteristic features of the condition with generalized weakness and spastic rigidity of the extremities. The legs are extended and toes pointed with inversion of the feet and clumsy, jerky, irregular movements. The arms also are flexed and rigid with fingers clenched over the adducted thumbs. The rigidity in this patient is so extensive and accentuated by handling that the deep reflexes are elicited with difficulty. Muscular atrophy is present. Strabismus is present. There is also present a high, narrow and arched palate with characteristic peg-like and notched Hutchinson's teeth.

Tuberous Sclerosis (Epiloia).

The next case is one I regard as exemplifying the condition of tuberous sclerosis or so-called epiloia. This is a very rare form of amentia characterized clinically by recurring convulsions associated with mental defect, which usually dates from birth and may be slowly progressive. Associated with these symptoms there is a distinct cutaneous affection in the form of *adenoma sebaceum*, involving especially the face, the forehead, the nose and the naso-labial folds. During recent years the condition has attracted much interest owing to the discovery in these patients after death of mixed tumours of the kidney, tumours made up of various elements of which the smooth unstriped muscle tissue is the most prominent. Tumours have also been reported in the heart (rhabdomyomata) and other organs in some of the patients, for example, myoma of the stomach and uterus. In the sclerotic types of amentia in general there is an over-production of neuroglial tissue and corresponding atrophy and disorientation of nerve elements with the sclerosis diffused fairly generally, but in this particular type the sclerosis is inclined to be localized in patches and these localized varieties are more apt to be associated with convulsions than the diffuse. In addition the sclerosis sometimes involves the cerebellum. Hence the triad, *adenoma sebaceum*, mixed tumour of the kidneys and tuberous sclerosis of the brain, constitutes the most important evidence of this disease entity.

The mental status consists of one of evident mental defect with epilepsy.

Convulsions are usually the first symptom to attract attention. They usually appear about the end of the first year; in a few patients they are preceded by irregular muscular twitching or head nodding. They continue during the life of the patient with considerable frequency and are indistinguishable from ordinary idiopathic epilepsy, major or minor. The mental impairment is noticed at an early age and usually progresses to a severe grade. There may be tremor, the balance may be unsteady and the gait tottering. The finale is said to be usually progressive dementia and death in *status epilepticus* or pneumonic complication. In patients presenting the above symptoms, if renal tumours can be palpated during life or there are persistent definite urinary changes in the form of uræmia, dropsy or albuminuria, the diagnosis can be made with tolerable certainty, but in other instances, as in our patient, it has been dependent upon the presence of convulsions associated with *adenoma sebaceum*, unsteady and tottering gait, headache, defective articulation and progressive mental impairment.

CASE 14. N.S., a female patient, aged forty-two years, was admitted on March 9, 1911, and has a characteristic aboriginal appearance, although the skull may not be characteristically dolicocephalic. Both the father and mother were full-bloods. There was one other child of the union, a male. The patient suffers from seizures of an epileptiform type, exhibits characteristic distribution of the sebaceous lesions on the face, appears to suffer from intermittent headache, has a tottering gait, defective articulation and has been deteriorating gradually for some years. The urine does not contain any albumin. She can feed herself, but is faulty in her habits and her speech at the present time is limited to one word and even this is of an inarticulate jerky nature. The apparent occurrence of this syndrome in a full-blood Australian aboriginal must be of extreme rarity and I can trace no reference to such in the literature on the subject.

Fröhlich's Syndrome.

The next patient is exhibited as demonstrating dyspituitarism due to syphilis and taking the form of Fröhlich's syndrome.

CASE 15. K.E.H., a male, was admitted on May 30, 1925. His present age is nearly nineteen years. He belongs to the imbecile group. In the social attitude group he is recorded as being not very helpful, inclined to be a follower, is gregarious, fairly obedient, but lethargic and negative. As regards personal qualities he has a little sense of responsibility, but no initiative, very little adaptability, is suggestible, grumbles at times, is not very clean, has very little interest in sexual matters, is very little self-conscious and manifests no display. His mental age is 8.2 with an intelligence quotient of 51. In 1926 there was definite specific retino-chorioiditis present. The blood yielded a Wassermann reaction. He has been treated with potassium iodide and mercury and intramuscular injections of "Muthanol." He was subsequently inoculated therapeutically with malaria, resulting in several rigors and there has been partial improvement. His pupils are unequal, the left greater than the right; they do not react to light. It will be seen that there is sparse distribution of pubic and axillary hair. The testes are the size of large beans; there is no moustache, the voice high pitched, there is lack of development of the secondary sex characteristics generally and a female distribution of fat, especially in the breasts and buttocks. The speech is unintelligible. He is clean in habits, can feed and dress himself, but is very troublesome, pulling off buttons, losing braces and bootlaces and his vocal articulation is becoming less distinct than formerly.

Dentition.

I am indebted to Mr. B. W. Champion, our surgeon dentist, for placing at my disposal several very interesting dental casts with descriptive notes which are well worth your attention. These demonstrate very excellently not only definite deformities in the dental arches due to prolonged faulty habits, such as hand sucking or thumb sucking, but also interesting conditions, such as congenital malformation of the palate and various anomalies regarding the teeth themselves and their alignment. Mr. Champion has kindly offered to explain these models to anyone interested in these particular features of our patients.

The first two models demonstrate the shelf-like projections often present in oxycephalic mouths and are taken at eighteen months' interval. At sixteen years of age the anterior four teeth are definitely bicuspid, the canines are unerupted and the posterior teeth are malplaced. On the right side the second bicuspid, the six-year and twelve-year molars are placed in a lingual to buccal direction, instead of antero-posteriorly. On the left side the six-year and twelve-year molars are placed in a similar manner. The object of treatment was to extract carious teeth and so widen the arch that the patient could talk more lucidly.

The second model shows that the left canine has erupted. The carious teeth have been extracted, the twelve-year molar is in position and the wisdom tooth is about to erupt. The right wisdom tooth has erupted. By a comparison of the two models an idea of the space gained can be estimated.

The third model is of a middle aged patient, about fifty years of age, and demonstrates the mucous membrane covering the lower arch to be very dense and hard. The upper teeth bite hard against it and the patient suffers no discomfort in masticating hard food. The lower arch, through constant use, follows the contour of the upper teeth. The remaining bicuspid in the lower jaw has made a seat for itself in the membrane of the upper jaw. This tooth, through use in lateral movement of the mandible, has worn itself and its opposing canine so that the dentine of the canine is well exposed. It is not sore or unduly tender to heat and cold and is not affected by sweet food; evidently secondary dentine has been formed.

The fourth model is of a patient of nine years, typical of a mouth breather suffering from adenoids and enlarged tonsils, showing the irregular teeth and poorly developed arch with high palate.

The fifth model is of a patient aged four years and shows the condition of the arch brought about by thumb sucking, the anterior teeth being brought forward and the palate posterior to these teeth being malformed. This patient puts its thumb well into its mouth to suck it.

The sixth is of an adult patient over thirty years and shows the remarkable extent to which the anterior teeth have been forced practically to a

horizontal plane as a result of the patient biting its wrist for a good many hours out of the twenty-four.

The seventh model is from a male, aged eighteen years, showing constricted arches and protruding teeth. This patient constantly sucks his two fingers and is a mouth breather.

Similar conditions are seen in the eighth and ninth models.

The tenth and last model is a good illustration of how the muscles of mastication properly working will expand arches, although the patient is a thumb sucker. The anterior teeth are protruding, but the posterior ones are occluding normally and the teeth show signs of wear. This patient is always chewing grit and any small articles it can get into its mouth. The posterior teeth show the typical curve of Spee which is rarely found in modern mouths.

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THE HEREDITARY FACTOR IN ALLERGIC DISEASES.

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THAT heredity plays a part in such diseases as tuberculosis and cancer is well known, and a vast amount of work has been done in connexion with this, but the heredity factor in the allergic diseases is less familiar. Yet the phenomenon would, I believe, well repay study, since it would appear from what is to follow that such study might throw light on the question of the nature of immunity.

The word allergy, as originally employed by von Pirquet, was rather too narrow. I employ the word here to indicate almost all forms of hypersensitiveness.

Allergy is beyond question the most important biological and medical problem that exists, . . . for it represents the pathology of the reaction of man and the

lower animals to their environment—to the air they breathe, the physical agents, such as light, heat, and cold, to which they are exposed, the food they eat, and the various parasitic organisms which may invade them.⁽¹⁾

Consequently we would expect allergic symptoms to be produced on body surfaces, external or internal, which may be exposed to the external environment, or to those structures which are derived from ectoderm or endoderm. The following list includes the majority of conditions which are certainly or in some instances probably of allergic origin.

Cutaneous: Urticaria; true infantile eczema; certain forms of pruritus; some erythemas; angio-neurotic oedema.

Respiratory: Paroxysmal rhinitis of which hay fever is one of the commonest; asthma.

Gastro-intestinal Tract: Certain forms of vomiting and diarrhoea; some pains of gastric origin¹ and the spastic colon.

Genito-urinary: Certain bladder pains probably,⁽¹⁾ especially in women.⁽⁴⁾

Nervous system: Migraine; epilepsy probably.

Balyeat⁽²⁾ in a recent work on human hypersensitiveness studied the influence of the heredity factor in a group of 1000 cases of asthma and hay fever. He found:

That 58.6% of all cases with a bilateral family history manifested clinical symptoms of specific hypersensitiveness in the first decade. There were 32.3% with a unilateral history that developed clinical symptoms within the first ten years of life. . . . In 30.8% of the unilateral cases symptoms developed between the ages of twenty and thirty years, which is in marked contrast to 10% of those with a bilateral family history that manifested symptoms during this same period.

Inheritance then is the chief factor in determining whether an individual will ever develop clinical manifestations of asthma or hay fever. This does not of course mean that the specific sensitivity is inherited, but the ability to become so is inherited. "The type of sensitivity the antecedent suffered from has no relation to the type the descendant may have" and this is well shown in the family chart here shown.

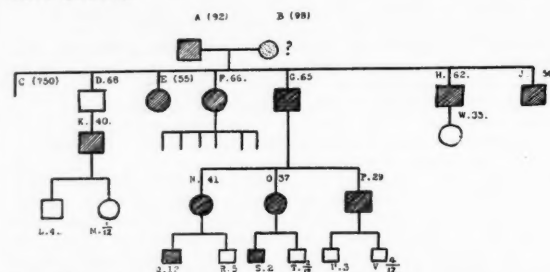


Figure showing genealogical tree. The square represents a male, the circle a female. Figures indicate present age; figures in parentheses indicate age at death. Shading indicates allergic manifestation. A = hunger pains and sinking feelings; B = eczema; E = infantile eczema; F = hyperacidity symptoms; G = migraine, hunger pains, hypertonic stomach; H = infantile eczema; J = sinking feeling marked; K = hay fever; N = hay fever, hypertonic stomach, pruritus, sinking feeling; O = infantile eczema, asthma, pruritus; P = pruritus; Q = infantile eczema; S = infantile eczema. See text for references to A, F. and J.

¹ Pains of gastric origin is my own addition and will be referred to later.



J. W. Arnitt

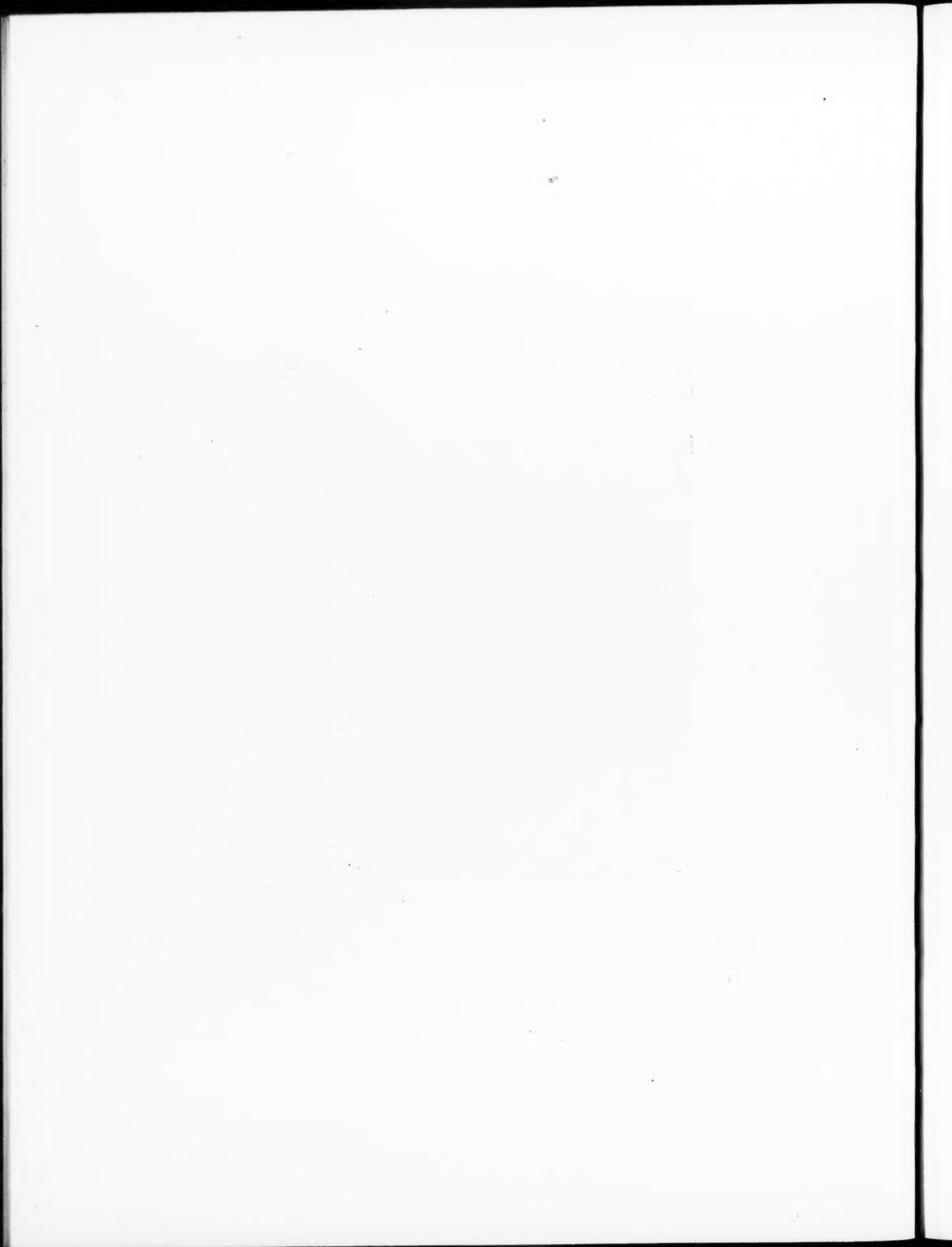
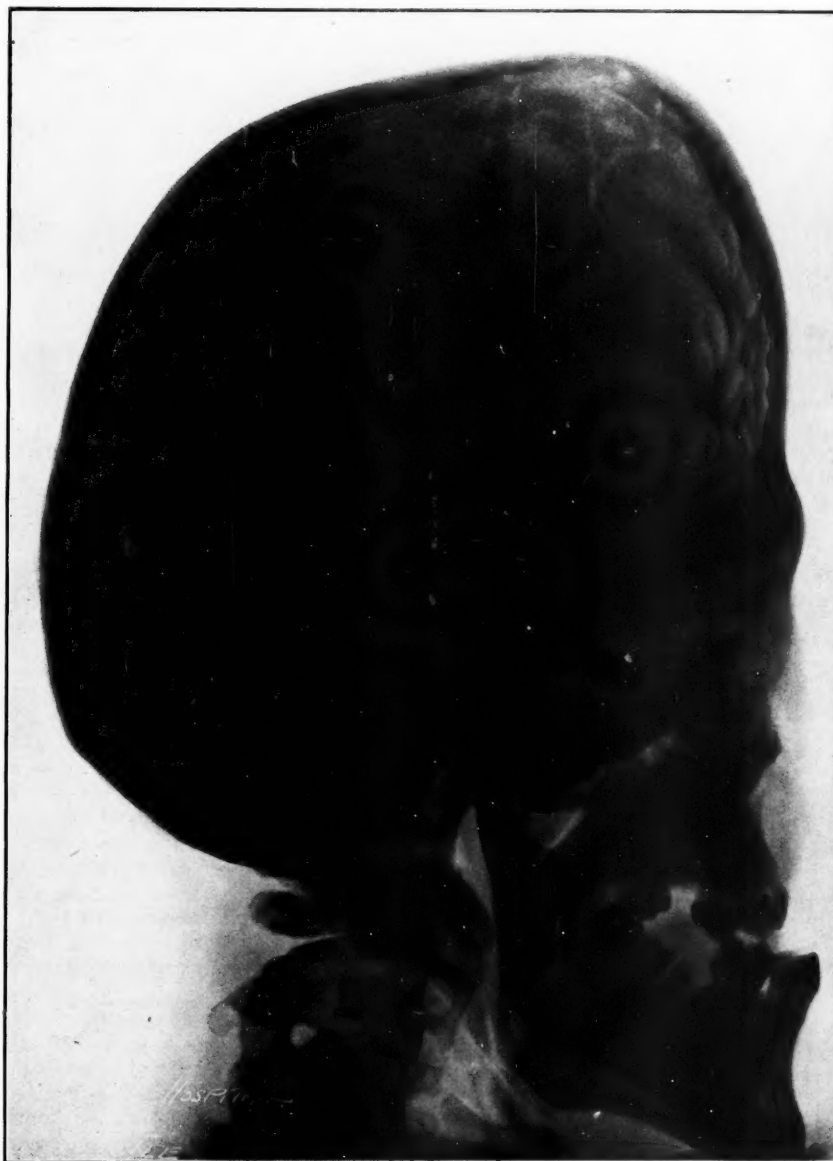
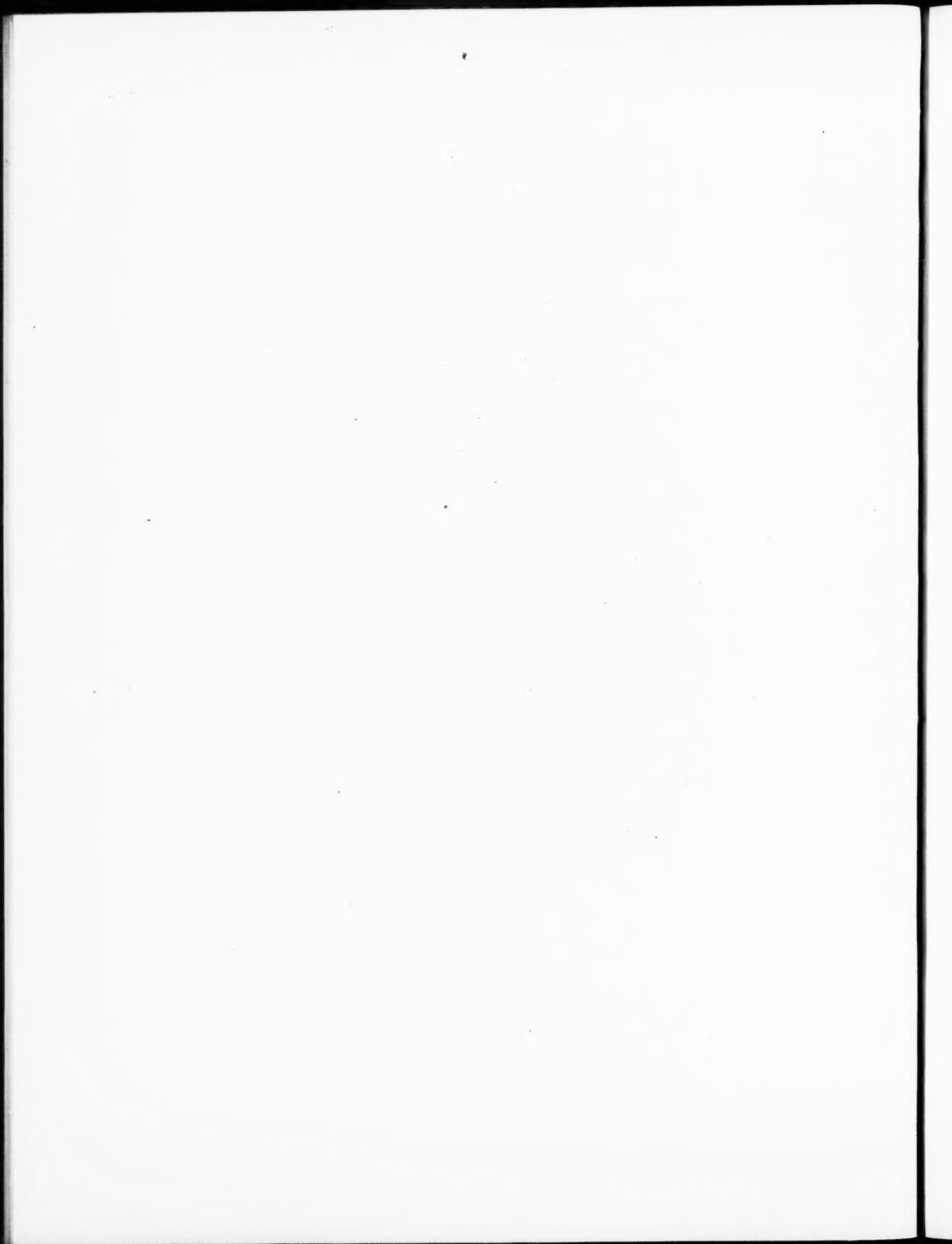


ILLUSTRATION TO THE ARTICLE BY DR. GREY EWAN.





In addition to the above Balyeat came to certain other conclusions some of which are briefly as follows: (i) The extent to which an individual is exposed to any given protein, has much to do with determining whether or not a sensitivity to that particular protein will develop; (ii) in the transmission, sensitivity behaves as a dominant in the Mendelian sense; (iii) in the linkage, eczema and migraine are interchangeable with asthma and hay fever; (iv) allergic patients develop a general resistance to infectious disease which is far above the normal; (v) allergic patients whose symptoms manifest themselves within the first or second decade seldom develop tuberculosis; (vi) allergic patients are generally far above the normal in intelligence.

In 1927 I referred⁽³⁾ to my own observations that people who possess what Hurst calls the hypersathenic diathesis or what we might call the duodenal ulcer type of stomach, commonly have a family history of migraine, hay fever and asthma and Ryle (1928)⁽⁴⁾ has noted the association of the spastic colon with these diseases.

The type of alimentary tract most commonly associated with these conditions is that in which we find symptoms indicative of hypertonicity, hyperactivity, hyperchlorhydria and pyloric and colonic spasm. All or only one of the forms of hyperirritability may be present and are indicated by such symptoms as the "sinking or empty feeling" soon after food and relieved by food, by mild "hunger discomfort" or even by constipation associated with dull aching pain at some spot along the colon *et cetera*. The patients are often of the thin, spare, anxious, somewhat introspective type and are usually of high intelligence.

On account of the frequent allergic associations mentioned above and illustrated by the family history to be described, I am inclined to regard this form of alimentary hyperactivity as related to or as a manifestation of the allergic diathesis. It would seem, in fact, to be merely another form of that hyperactivity of plain muscle, seen in the allergy conditions, which is responsible for the spasms of asthma, certain forms of vomiting and diarrhoea and possibly certain bladder pains.

We should almost expect the plain muscle of the stomach and intestine to exhibit the same qualities of overactivity as those suggested above. These qualities are well shown in the family history appended.

In this family tree I have recorded only those individuals of whom I have personal knowledge, or from whom I was able to obtain information which I regarded as quite reliable. These individuals are indicated by a square (for females) or a circle (for males). Those who have manifested any of the symptoms classed above as allergic are indicated by shading. The figures refer to present age or age at death. If we exclude all members of the latest generation, (except S who now has infantile eczema) who have not yet completed their first decade and have hardly had time to exhibit allergic manifestations, there remain sixteen people, of

whom twelve or thirteen show allergic symptoms. B is however open to much doubt. He had eczema "all his life" and it is doubtful if we can therefore include him in the series. On the other hand it is almost, if not quite, certain that the allergic inheritance passed through A, since inquiry from several descendants of A's brothers and sisters indicates that asthma is markedly common among them and must therefore have been derived from their common ancestors, namely, A's parents.

This family tree illustrates several other of Balyeat's "laws." They are long lived and there have been no cases of infectious fever, tuberculosis or carcinoma among any of those of whom I have knowledge. The family is also highly intelligent, two of the males having attained high distinction in intellectual and artistic circles.

The persistence of the allergic diathesis through five generations (including A's parent) is remarkable, since, so far as I can ascertain, there has been no influx of allergic blood by the marriage of the descendants of A and B.

A most interesting phenomenon and one that should repay close study, is the high degree of immunity of these people with the allergic diathesis to infections. Does this hypersensitiveness mean that the defensive mechanism is always on the *qui vive* and reacts with greater ease? In terms of Ehrlich's "side-chain theory" the hypersensitive tissue may be one having more than the normal number of chemical linkages with the substances producing the symptoms of allergy. As antibodies are according to this theory merely detached side-chains or linkages, we would expect the allergic patient more readily to develop antibodies and so immunity to the various infective diseases.

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- ⁽³⁾ F. L. Apperley: "The Non-Organic Dyspepsias," *THE MEDICAL JOURNAL OF AUSTRALIA*, October 22, 1927, page 571.
- ⁽⁴⁾ J. A. Ryle, "Chronic Spasmodic Affections of the Colon," *The Lancet*, December 1, 1928, page 1115.

ACUTE INTESTINAL OBSTRUCTION IN INFANCY AND CHILDHOOD.¹

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Women, Paddington.

By acute intestinal obstruction we mean the sudden and complete blocking of the onward flow of intestinal contents. The underlying cause may be a congenital one or it may be an acquired process.

¹ Read at the annual meeting of the Section of Paediatrics of the New South Wales Branch of the British Medical Association on March 7, 1930.

CONGENITAL OBSTRUCTION.

Congenital obstruction is either due to definite stenosis or complete atresia of the bowel lumen. Bland Sutton has formulated the theory that these conditions are due to errors of development at the sites of important embryological events and he states that the more important the event, the more likely is a malformation to result at that site. For example, an imperforate pharynx occurs at the spot where the foregut unites with the stomadeum. An imperforate duodenum occurs at the point where the diverticulum arises which later forms the liver and pancreas. An imperforate ileum is frequently found in the region where the vitelline duct communicates with the primitive alimentary tract on the one hand and the yolk sac on the other.

The varieties of stenosis and atresia are numerous, but the commoner are: (i) Duodenal stenosis, of which there are three varieties, according as to whether the obstruction is above, opposite or below the biliary papilla; (ii) jejunal and ileal atresias and obstructions at the ileo-caecal valve; (iii) colic obstructions; (iv) rectal malformations. The lesions may be multiple, the ileum and jejunum being the commonest sites of these.

Duodenal stenosis is generally single and is more often proximal than distal to the biliary papilla. The obstruction may be in the form of a diaphragm-like structure, but more often there is a gap of 2.5 or 5.0 centimetres (one or two inches) or more between the blind ends of bowel. Sometimes these ends are connected by an impervious cord devoid of any bowel wall structure. The bowel above the obstruction is generally greatly dilated and in duodenal stenosis it may be as large as the stomach itself. The bowel below is always smaller than normal and appears to be underdeveloped and this fact sometimes makes it difficult or impossible to overcome the obstruction by means of an anastomosis between these two unequal portions.

In the colic obstructions the colon sometimes ends blindly at the point where it should join the rectum, but perhaps more often the whole colon is greatly contracted and underdeveloped. These conditions are often diagnosed as imperforate conditions of the rectum.

All these varieties of congenital abnormality of the intestinal tract are apt to be associated with other malformations such as *ectopia vesicæ*, Meckel's diverticulum, imperforate urethra *et cetera*.

Symptoms.

The symptoms are those of complete obstruction coming on soon after birth. The vomiting is frequent and persistent. Abdominal distension occurs in most cases and when the obstruction is low down it is more or less uniform. In duodenal stenosis the stomach stands out prominently, somewhat resembling the appearance seen in pyloric stenosis, but the visible peristaltic waves are not so prominent a feature as in pyloric stenosis and the vomiting begins immediately after birth.

Treatment.

Treatment differs from that of acute intestinal obstruction in the adult in several particulars. In the adult it is generally advisable to relieve the obstruction by making a fistula above it for two reasons. First, a lateral anastomosis is generally impossible on account of the unhealthy condition of the bowel which would have to be sutured and, secondly, it is advisable to make a fistula in most cases so as to empty the bowel of its exceedingly toxic content. These conditions do not hold good in the congenital obstructions and, if it is possible to anastomose the bowel above and below the obstruction, this should be done. It is sometimes impossible, however, to do this on account of the contracted state of the bowel distal to the obstruction, but this portion can sometimes be distended with air or water, so as to dilate it satisfactorily before anastomosis is attempted. When the obstruction is in the duodenum, a gastro-jejunostomy is the correct procedure and when the atresia is high up in the rectum, it is necessary to make an artificial anus.

ACQUIRED INTESTINAL OBSTRUCTION.

Acquired intestinal obstruction may be divided into two types: mechanical and dynamic.

Mechanical Obstruction.

Examples of mechanical obstruction are the following: intussusception, hernia, volvulus, Meckel's diverticulum, bands and adhesions other than those associated with Meckel's diverticulum, tumours either of the wall of the bowel itself or obstructing it by pressure from without, foreign bodies.

Dynamic Obstruction.

Under the heading of dynamic obstruction are placed conditions interfering with the action of the intestinal musculature and causing either spasm or paresis. Hirschsprung's disease may be placed in this group.

On perusing the records of the Children's Hospital for cases of intestinal obstruction, I found that there had been 227 patients with intussusception admitted during the last five years. Patients with intestinal obstruction due to other causes were comparatively few. During the last three years there had been three cases of congenital obstruction, one case of obstruction due to tumour of the bowel (lympho-sarcoma). There had been one patient admitted in whom a Meckel's diverticulum had been the cause of obstruction, one whose obstruction was due to a volvulus and two in whom post-operative adhesions had been responsible.

It is not my intention to consider all these varieties, as I desire to deal mainly with obstruction following on abdominal operations. I have seen recently three patients with obstruction after operations. One was after an operation for inguinal hernia and two were caused by adhesions after operations for the cure of appendicitis.

To get some idea of the frequency of intestinal obstruction after operations for appendicitis, I

examined the records of cases of this kind in patients who had been under my care at the Children's Hospital, Sydney. I found that there had been one hundred and sixteen patients operated on by me since March, 1905, and in only one instance had intestinal obstruction followed the operation. Three of the patients had died, all from general peritonitis. Dr. Gertrude Herzfeld found that among a series of one hundred and ninety-seven patients with acute appendicitis, six developed true post-operative obstruction.

Of the three patients with obstruction mentioned above, the first was a child, aged six years, and the obstruction occurred on the fifth day after a clean straightforward appendix operation. The operation for the relief of the obstruction was done by Dr. Humphries and he found that a loop of bowel had become strangulated by a band which appeared to stretch from the ileo-caecal junction to a point near the end of the caecum.

The second obstruction was in a child, aged four years, and the obstruction developed on the fifth day after operation, at which the appendix had been found to be gangrenous and when extensive peritonitis had been present. This case occurred in my private practice and I will refer to it again later.

The third obstruction was in a child, aged three years, and began on the fifth day after operation for the cure of a very large inguinal hernia. This child died and a *post mortem* examination revealed that acute angulation of the bowel had been caused when the sac had been ligatured. The lower end of the mesentery was quite close to the internal inguinal ring and the pulling down and ligaturing of the neck of the sac had caused the angulation of the bowel and later on acute obstruction at the point.

When intestinal obstruction follows an abdominal operation, it is generally due to acute angulation of the small bowel, owing to a loop becoming adherent to either the parietal peritoneum or to some other portion of small or large bowel. Obstructions like the first mentioned above are rare, although I have seen one instance in which acute obstruction had been caused by strangulation of a segment of the bowel through a loop formed by the tip of the appendix having become adherent to the ileum. Obstructions in which a Meckel's diverticulum has formed portion of the offending loop, are not uncommon and I have seen several such cases.

Whatever the cause of the obstruction, the bowel above soon becomes acutely distended, the distension extending progressively upwards. When portion of the bowel has become strangulated, signs of interference with its blood supply soon become manifest. The bowel becomes congested and very soft and friable. The intestinal contents above the obstruction become exceedingly toxic and some authorities consider that certain specific substances are formed in this distended bowel, accounting for the severe toxic symptoms which so rapidly develop. The particular poison formed belongs to the group of toxic proteins and it has been shown that this

poison is present in greater quantities at the duodenal end of the bowel than at the ileal. Some authorities assert that the ileum indeed is incapable of manufacturing this particular poison. Below the obstruction the bowel is empty and collapsed, but otherwise normal.

Acute obstruction is followed in twelve to eighteen hours by serous effusion into the peritoneum and organisms from the intestinal tract soon find their way into this effusion. Fibrinous deposits soon form and glue coils of intestine together.

Symptoms.

The three cardinal symptoms are pain, vomiting and constipation. The pain is sudden in onset; colicky at first, it soon becomes continuous. It is generally felt at first about the region of the umbilicus, but when the obstruction is in the large bowel it is generally more pronounced in the lower part of the abdomen.

The vomiting is first of stomach contents, then bilious and later, generally on the third or fourth day, faecal, but it is always persistent and frequently repeated, thus differing from the vomiting of inflammatory conditions such as appendicitis, where it occurs only at the onset, unless general peritonitis supervenes.

The constipation is absolute, but an enema may result in the emptying of the bowel below the obstruction and even a very little flatus may be passed and this sometimes leads to a diagnosis of incomplete obstruction being made. Distension of the abdomen is generally present, but it is only pronounced when the obstruction is low down. The higher the obstruction, the more acute are all the symptoms and the less the distension. Visible peristalsis is not common in acute obstruction, unless the abdominal walls are very thin, but is common in chronic cases. Tenderness and muscular rigidity are never so pronounced in the acute obstructions as in the inflammatory conditions.

The temperature is generally around normal and the pulse quickened.

Treatment.

Once the diagnosis of acute intestinal obstruction has been established, its immediate relief is a matter of extreme urgency. Unfortunately we still see too many patients to whom an aperient has been given, and too many to whom morphine has been administered before a definite diagnosis has been made. It cannot be too strongly emphasized that both these procedures are quite out of place in the treatment of any form of intestinal obstruction. An enema may be given a trial, but never an aperient if there is any suspicion of acute obstruction.

"Pituitrin" or eserine is sometimes given hypodermically, when the signs of obstruction are deemed to be due to a temporary paresis of the bowel; but both these drugs are dangerous in acute obstruction. There is, therefore, only operative treatment to be considered, excepting in the treat-

ment of intussusception, where operative treatment can be dispensed with in the majority of cases. As I have dealt with this subject elsewhere,⁽¹⁾ I do not intend to make further reference to it here. The actual operation, of course, depends on the cause of the obstruction and the vitality of the bowel involved. First I should like to stress the importance of making a median incision whenever there is any doubt as to the kind of lesion likely to be encountered. Sometimes one is tempted to make incisions elsewhere in the belief that better access can be obtained, but usually the trouble can be better seen and more satisfactorily dealt with through a median incision. Bands and adhesions can be divided and any loop of strangulated bowel freed quite easily through a mid-line incision. If a portion of the bowel appears to have lost its vitality, the question of excision arises. The bowel may appear at times to be almost gangrenous, but the dark colour is more often due to extensive hæmorrhagic infiltration than to gangrene. In such cases the return of the circulation in the vessels after the strangulation has been relieved will be obvious after close examination, especially if the bowel be returned into the abdominal cavity for a few minutes. When actual resection of a gangrenous loop is deemed to be necessary, the mortality following this procedure is so great that a better result is generally obtained by doing a lateral anastomosis well away from the gangrenous loop, to be sure of anastomosing healthy bowel and then bringing the gangrenous loop outside the abdomen and uniting the abdominal wall behind it.

The treatment of acute obstruction following septic appendicitis presents special difficulties. Here there is generally a wound which is discharging pus freely, and this complicates matters considerably. Here there is a risk in freeing the adherent loop owing to the danger of spreading the infection and so one has to be content with opening the first distended loop encountered. Sometimes, curiously enough, after this is done, the adherent loop causes no further trouble, but if the obstruction persists, the fistula will not close and the child may rapidly waste owing to the drainage through the fistula and one is then faced with the further risk of operation on a starved and emaciated child.

Before the distended loop of bowel is opened, it is advisable first of all to empty it above by means of a trocar passed through a healthy region well above the obstruction, so as to remove immediately as much as possible of the exceedingly toxic material which it contains. A catheter can then be inserted and stitched into the bowel, after it has been passed through a hole made in the omentum, as by so doing the fistula is more likely to close spontaneously on the withdrawal of the catheter.

To afford better illustration of the difficulties in dealing with these conditions, I should like to record more fully the second case referred to above.

W.M., aged four years, was operated on for a gangrenous appendix, accompanied by fairly extensive peritonitis. The

appendix was removed through a muscle splitting incision and a rubber drain inserted. The bowels were opened on the second and third days, but signs of acute obstruction appeared on the fifth day.

On the sixth day a median incision was made and a small calibre metal tube was inserted into the first distended loop encountered. The child improved immediately, but soon began to waste rapidly. Nothing had been done to free the adhesions which were causing the obstruction, as the original wound was septic and any attempt to separate these would probably have resulted in general peritonitis. The tube was forced out four days after the enterostomy operation. The fistula gradually enlarged and the mucous membrane began to prolapse through the wound. The skin of the abdominal wall became excoriated owing to the irritating nature of the discharge from the bowel. By strapping over the fistula a large calibre rubber tube, cut obliquely at one end and fitted with a flange flush with the obliquely cut end, I was able to cause the discharge to pass along the tube and so to protect the skin. The end of the tube was inserted into an old rubber hot-water bag and the amount of discharge could thus be collected. It amounted to from six hundred to seven hundred and fifty cubic centimetres (twenty to twenty-five ounces) every day. I have used this device on a number of similar occasions and have found it to be an eminently satisfactory method of preventing the irritating intestinal discharge from producing extensive excoriation of the skin. I tried giving some of the discharge *per rectum*, but without success. The child rapidly became extremely emaciated and I decided to do a lateral anastomosis of the bowel, so as to exclude the fistula. This was done under general anaesthesia, as it was impossible to infiltrate the skin satisfactorily with "Novocain." About three hundred cubic centimetres (ten ounces) of citrated blood were given intravenously before the operation. The operation had to be done rather hurriedly on account of the condition of the child. After operation, however, the discharge still continued to come through the fistula, instead of passing along the new path. Although there was a slight improvement for a few days, the child soon relapsed into a condition worse than before. After a week, as the condition of the child was desperate, I decided to make another effort to relieve the obstruction. After again giving an intravenous blood transfusion and two hundred and forty cubic centimetres (eight ounces) of 12% glucose and saline solution, also intravenously, I opened the abdomen by surrounding the fistula by two semicircular incisions and after withdrawing the bowel on either side of the fistula, I made a lateral anastomosis between the bowel immediately proximal and distal to the fistula. The previous anastomosis had been done further away from the fistula. At the same time the adhesions about the ileo-caecal region were separated. In spite of the operation the bowels could not be got to act and ten days later the child died after a severe convulsion lasting two hours.

This case illustrates several interesting features to which I should like to make reference. First, although the child was apparently *in extremis*, it stood the operation well, after a blood transfusion had been given beforehand followed by several intravenous injections of glucose and saline solution.

Secondly, I found that it was possible to utilize quite well the same site in a vein for giving several intravenous injections and two transfusions. I found it necessary to do this, as the child had been given several transfusions during the earlier operations and both median basilic veins and one internal malleolar had been used. The other internal malleolar vein was exposed through a small incision and utilized for the giving of one transfusion of blood and two injections of glucose and saline solution, the interval between the injections being four hours. A third point which impressed itself

on me, was that, although the skin around the fistula had been bathed for weeks with irritating faecal looking discharge, all incisions made in this region healed as well as if made in healthy skin. This was due no doubt to the absence of pathogenic organisms from the discharge which came from a point high up in the ileum.

I have seen two other children die during the last few years from jejunal fistula. In both the fistula was due to the too prolonged use of a rubber drainage tube. In one the tube had been inserted into the appendix wound and in the other it had been inserted into the left flank in a child with extensive peritonitis following on a ruptured appendix.

In cases like the above, therefore, when a fistula is present causing rapid wasting and not showing signs of spontaneous closure, it is essential to operate and to close it early, even though the skin about the fistula is unhealthy. It is better to risk an operation through such unhealthy skin than to allow the child to die from starvation.

REFERENCE.

¹ P. L. Hipsley: "Intussusception and its Treatment by Hydrostatic Pressure: Based on an Analysis of One Hundred Consecutive Cases so Treated," THE MEDICAL JOURNAL OF AUSTRALIA, August 14, 1926, page 201.

Reviews.

ULTRA-VIOLET RADIATION.

DR. PERCY HALL is an enthusiast on the subject of actino-therapy and his book, "Ultra-Violet Rays in the Treatment and Cure of Disease," has reached its fourth British and third American edition in five years.¹

The greater proportion of the book is devoted to an historical *résumé* of heliotherapy, propaganda for the establishment of light clinics in Great Britain and an excellent description of the various types of apparatus available for the production of ultra-violet rays. In the remainder of the book the author describes the treatment of numerous diseases. The tungsten arc lamp is advocated as the most suitable type for the general practitioner, but for the specialist all types are required. The use of a "filter" to be placed between the source of ultra-violet rays and the object to be examined is recommended for the diagnosis of various dermatoses. No mention is made as to what type of filter is to be used, though we presume that Wood's glass is referred to. Ultra-violet rays filtered through Wood's glass impart to hairs infected with ringworm a characteristic green phosphorescent colour and constitute a very valuable diagnostic agent.

A pernicious statement twice repeated is that a preliminary exposure of the patient's skin to ultra-violet rays enables a dose of X rays greater than a normal dose to be given subsequently without risk. This statement cannot be too strongly condemned. It has been experimentally disproved and might be the cause of a tiro in X ray therapy causing severe pain and permanent damage to his patient.

¹ "Ultra-Violet Rays in the Treatment and Cure of Disease," by Percy Hall, M.R.C.S. (England), L.R.C.P. (London), with an introduction by Sir Henry Gauvain, M.A., M.D., M.C. (Cambridge), F.R.C.S. and Leonard E. Hill, M.B. (London), F.R.S.; Fourth Edition; 1929. London: William Heinemann (Medical Books), Limited. Demy 8vo., pp. 266, with illustrations. Price: 12s. 6d. net.

The advice as to dosage is vague and no mention is made of the varying degrees of reaction that can be produced. The beginner will find that the advice boils down to: "Try and see what happens."

The effects of ultra-violet ray therapy in various disorders are grouped under chapters such as "Skin Diseases," "Rheumatism," "Neurasthenia," "Tuberculosis," "Asthma and Other Disorders of the Respiratory Tract," "Endocrine Disturbances and Deficiency Diseases," "Metabolic Disorders," "Special Sense Organs," "Dental Disorders" and "Malignant Disease," truly a comprehensive list.

Alopecia prematura is according to the author particularly amenable to ultra-violet ray therapy and he has had no failures. Surely if this were true, there would be no bald heads left in the world. However, there seems to be some doubt in the author's mind as to the differential diagnosis of *alopecia prematura* and *alopecia areata*.

Figure 48 and Figure 49 depict a leg before and after treatment. In the text the lesion is described as ulceration of unknown origin. The condition would appear to be Bazin's disease (*erythema induratum*). Widely differing types of "rheumatism" are treated and cured, but in many of the cases described diathermy had also been applied, so that it is manifestly unfair to claim these patients as cured by ultra-violet rays.

Under neurasthenia we are glad to note that "cases of hysteria do not respond well to actino-therapy, some being made undoubtedly worse." Why disorders such as disseminated sclerosis and locomotor ataxia should be included in a chapter on neurasthenia probably the author alone knows.

In tuberculosis of the so-called surgical type excellent results are claimed for ultra-violet rays. In this chapter a description of diathermy apparatus and its use in tuberculosis is for some unknown reason given.

A claim for a cure of hypothyroidism by ultra-violet rays is made in spite of the fact that thyroid gland extract was being exhibited at the same time.

An attempt is made to discredit the theory that the ultra-violet rays are responsible for many carcinomata of the skin. The author would have the reader believe that skin cancer occurs almost exclusively in sailors and that in them it is the salt water, tar and the trauma of handling ropes that are responsible for keratoses and epitheliomata. A perusal of the works of Paul, Molesworth and other Australian dermatologists would convince the author of the error of his conclusions.

The book is well got up and is clearly printed on an excellent glossy paper and well illustrated. Anyone wishing to take up actino-therapy could read that portion dealing with apparatus with advantage; the portion dealing with therapy would be better left unread.

GRAPHOLOGY.

ROBERT SAUDEK's book, "Experiments with Handwriting," is essentially a treatise on the subject of graphology; indeed the author announces that in some of the editions published elsewhere, the book appears under the title of "Experimental Graphology." However, the work is a most comprehensive treatise on the human gesture we recognise and know as handwriting.¹ We might almost say it is a colossal work of its kind; much larger than any other volume on the subject.

At a preliminary glance one can hardly see the wood for the trees; so that nothing short of a complete perusal will satisfy the student in calligraphy and graphology. Here we have something more than the mere pourings of a scribe smitten with the *cacoethes scribendi*.

¹ "Experiments with Handwriting," by Robert Saudek; 1928. London: George Allen and Unwin, Limited. Royal 8vo., pp. 393. Price: 18s. net.

Mr. Saudek gives us a great variety of well illustrated specimens in different languages of various styles of handwriting and explains their correlation with the subconscious muscular control or absence of control on the part of the writers. He takes us from the laboured pen efforts of early childhood when the script is ill-formed and immature, onwards to the normal and automatic handwriting of adolescence.

Considerable space is given in dealing with the speed of the pen whilst engaged in the act of writing and it is interesting to find that the cinematograph has been utilized in determining the velocity of the pen traversing the paper or the measurement of the speed of the handwriting, by means of which a unit of speed is established to express and record the rate of the pen or pencil in forming words and sentences. This is termed the Freeman unit.

This is very good as far as it goes, but we do not find a single graph of plotted measurements recording the relative size of the small letters of comparative classes of cursive styles of handwriting, such as are found and plotted by Locard who has raised the art to what may be termed graphometry, a step beyond mere graphology. Locard's name appears only in a fleeting note on page 366. No mention is made by Mr. Saudek of the symptomatic significance of change in size although relative size is dealt with at length, but no specimens are given. In view of its psychological importance, it is interesting to observe that full expression is given to a method of detecting forgery by the close scrutiny of both word and letter endings when the forger or imitator is mentally unable to follow up the process of imitation and lapses back to his own style of writing; this failure of continuous concentration is found on page 135 *et sequentes*.

From the medico-legal point of view we should have liked to have seen more space given to the handwritings of patients under abnormal conditions, such as drug addicts or persons excited by various intoxications or of persons suffering from paresis or conditions of deep emotion, terror and mental derangement and of the confused cursive script characteristic of insanity.

The author does indeed give us illustrations of Dr. von Langenback who suffered from paralysis or partial paralysis of the fingers and forearm, also specimens of the handwriting of Charles Dickens written on the day before his death, compared with his normal script. There are also specimens of abnormal and morbid writing including writing produced by holding the pen by the feet or between the lips. Such pathological conditions of writers are sometimes of great interest and value in criminal research and legal investigations. The utility of a treatise such as Mr. Saudek provides, will be obvious to the practising barrister and solicitor, not to mention the judge who is at times apt to discount all expert evidence in handwriting. *A propos* of this attitude of the bench the author in his preface points out that: "The justifiable doubts entertained by the judicial authorities as to the reliability of the methods of investigation employed by handwriting experts, and the much more justifiable doubts entertained by scientific critics of the reliability of characterological graphology, have had this result: that both groups of handwriting experts in defending themselves against their critics, are accustomed to indulge in fanatical and fantastic exaggerations of the importance of their science and the cogency of their arguments."

Much of this want of confidence in tests made by handwriting experts arises from previous failures in diagnosis in the evidence given in court in the Parnell-Pigott cases in England and particularly the Dreyfus case in France. It must always be remembered, however, that such opinions were based on questionable methods in vogue half a century ago and Mr. Saudek only too plainly shows in the book before us, how materially different are the methods of investigation as now brought up to date.

The author devotes very considerable space to the revelation of the character and moods of the writer reflected in the style of handwriting studied simply as a human gesture; but it is one thing to be able to deduce the feature of modesty in a signature like that of Darwin, of firmness in that of the Duke of Wellington or the

bizarre flourish of some vanity stricken scribbler, but quite another matter to say, as some writers do, that it is possible to affirm that one specimen indicates bashfulness while another specimen proclaims benevolence! Such speculations cut very little ice; still this fascinating art is of great use in forensic practice, to wit in the detection of forgery and in the discovery and identification of the obscene writer or blackmailer.

In a treatise otherwise so comprehensive and well illustrated we should have liked to see some reference as to the relative age of handwriting, especially to the work done in this direction by Ainsworth Mitchell and Osborn who in addition to the microscope employ ultra-violet rays and the tintometer in their researches.

A work of this kind would be more useful if the author provided an index of the subject matter. This should be added in a future edition.

PSYCHOLOGICAL ASPECT OF DISTURBANCES OF THE SEXUAL FUNCTIONS.

"DISORDERS OF THE SEXUAL FUNCTION"¹ is written by a urologist who shows considerable insight into the psychological aspects of his subject owing to his association with a neurological clinic where a proportion of the patients were referred to him for genito-urinary examination. It is obvious that the neurological clinic as well as the urologist would benefit by such an arrangement. Physiology and psychology are interdependent sciences which have been separated for convenience of study. Efficient practice depends upon utilization of both sciences especially in such disorders as those of sex.

The author of the book under review is very practical in his point of view and avoids extremes. This is exemplified in the chapter on masturbation in which he not only condemns the unscientific exaggerations that are often made by quacks, both medical and ethical, but also recognizes that masturbation should be dealt with in a scientific manner. He asserts that habitual masturbation can usually be stopped by instillation of silver nitrate into the posterior part of the urethra. Impotence is classified into organic, functional and psychic. He defines the term functional as synonymous with physiological. In the discussion of psychological factors fear and suggestion are described, but other important causes are omitted. There is not sufficient emphasis on the normality of what he labels pollutions and not sufficient recognition of the fact that they can be merely a reflex effect from over distension of the seminal vesicles.

Belladonna is the drug which he recommends for enuresis; though he mentions the good effect of thyroid extract in certain circumstances.

During a discussion on the reflex symptoms following *coitus interruptus*, among which palpitation is mentioned, he states: "There is hardly an organ in the body whose workings may not be disturbed by the reflexes coming from the abused sexual function." This fact should be mentioned on every page of medical text books.

The only important defect of the book is the fact that environmental factors are not sufficiently emphasized in connexion with psychological causes. Until bacteriology came into its own, heredity was very much overstressed when invoked to explain the occurrence of tuberculosis in the offspring of tuberculous parents. It is now realized that it was the infected environment that was the important factor. It is only in recent years that psychology has produced evidence that abnormal psychological conditions in the family circle may lead, among other disabilities, to abnormal sex development. The author does not appear to have appreciated the importance of the fact that an unhealthy environment during childhood may lead to disorders of the sexual function.

¹ "A Practical Treatise on Disorders of the Sexual Function in the Male and Female," by Max Hühner, M.D.; Third Edition; 1929. Philadelphia: F. A. Davis Company. Royal 8vo, pp. 357. Price: \$3.00 net.

The Medical Journal of Australia

SATURDAY, APRIL 5, 1930.

Anaesthetists and Anaesthetics.

THE creation of the Section of Anaesthetics at the third session of the Australasian Medical Congress (British Medical Association) has invested the subject of anaesthesia with an added dignity as far as Australia and New Zealand are concerned. The innovation was overdue. That the anaesthetists realized the significance of the occasion is evident from the number and character of the papers presented. Dr. F. H. McMechan, the Secretary-General of the International Anaesthesia Research Societies, who has done more than any man living for anaesthetists and anaesthesia, graced the meeting with his presence. His contribution on the evaluation of the surgical risk was a masterpiece and his remarks in discussion were indicative of the depth of his knowledge. Dr. Gilbert Brown, who had the honour of being the first President, spoke on anaesthesia in relation to lung disease. The subjects discussed by other members of the Section included endotracheal anaesthesia, the position of the patient during anaesthesia, cardiac disease and anaesthesia, local anaesthesia and spinal anaesthesia, rectal narcotics, ethylene and nitrous oxide anaesthesia, ethylene given by the intratracheal method, and deaths under anaesthesia. A summary of all these papers was published in THE MEDICAL JOURNAL OF AUSTRALIA of October 19, 1929.

Certain general conclusions may be formed from a perusal of these articles. These need emphasis. In the first place a great deal can be discovered about the patient before operation is undertaken. The maxim "safety first" holds true in anaesthesia almost more than in any other procedure. It is conceivable that in certain circumstances the patient may be so seriously ill or so severely injured that it may be impossible to carry out a prolonged examination, particularly one which includes chemical examination of the blood. In other circumstances the determination of the respiratory index, the

application of the Cornell test for the discovery of early nephritics, the determination of the circulatory index and of the energy index, the discovery of vagotonia, the determination of the haemoglobin content of the blood, the estimation of the blood sedimentation rate and in certain cases the estimation of the urea nitrogen, non-protein nitrogen and creatinin values are necessary. Dr. McMechan has described these methods. Tests such as these should not be regarded as optional. If they make for safety, and it is generally agreed that they do, they must be used whenever possible. Unfortunately the anaesthetist often sees the patient for the first time on the operating table, but the remedy for that state of affairs rests largely in his own hands. Careful routine examination will often reveal some unexpected abnormality and even the condition for which the patient is to be operated on will sometimes call for preoperative treatment. Familiar examples of such conditions will be found in *diabetes mellitus*, necessitating administration of "Insulin," and in certain liver diseases calling for the use of dextrose and a high carbohydrate diet. When the condition of the patient has been accurately ascertained, the anaesthetist has to decide which form of anaesthesia he will adopt. In this he must be guided neither by the individual preference of the surgeon nor by his own. The pathological condition necessitating the operation and the nature of the operation will be the determining factors. It thus follows that he must be skilled in all available methods. He will not be justified in using any method which may be compatible with the patient's condition and with the comfort of the surgeon, if there is another method which is safer or less disagreeable to the patient.

No discussion on anaesthesia would be complete without special reference to local anaesthesia or analgesia. The arguments in favour of its adoption need not be repeated in this place. It is wrong to consider it as a thing apart. It should be part and parcel of the equipment of every anaesthetist. There is no doubt that Dr. C. E. Corlette is right in his view that the surgeon should not always be called upon to carry out the necessary injections. He should, of course, be able to do so, if necessary. It

seems doubtful whether seniors who have used inhalation methods for many years will be induced to modify their usage. If they do not give up their conservatism, their juniors will have an advantage over them, for the latter are gradually being brought to recognize the necessity for acquiring facility in the use of local analgesics. There are occasions when the use of any other method is not in the best interest of the patient; in other words, when the use of other methods is wrong.

The final point to be considered, is that the responsibility of the anaesthetist does not end when the patient has been taken from the operating theatre. The treatment of vomiting due to anaesthesia should be in the hands of the anaesthetist; he should make it his business to see the patient until recovery from anaesthesia is complete.

It must be concluded from what has been written that the anaesthetist is a specialist in the truest sense. The time has come when he should be recognized as such.

Current Comment.

TUBERCULOSIS.

INFECTIVE diseases such as enteric fever and small pox may be successfully combated by protective inoculation. Nature makes a somewhat analogous attempt to mitigate tuberculous infection in human beings; the result is less effective than that obtained in the two diseases just mentioned. A great number of persons, particularly in the densely populated centres of the old world, receive an infecting dose of tubercle bacilli in early life. This initial infection does not, of course, prevent subsequent reinfection, but it is held to influence the course of the disease should such a reinfection occur.

Professor Eugene L. Opie discussed this question in a lecture which he delivered recently before the Harvey Society of New York.¹ He states that a conception of tuberculosis is gradually being acquired which explains many obscure aspects of its pathogenesis and which promises to modify profoundly the procedures for its control. He describes this conception briefly by the statement that tuberculosis of early life has the characters of a first infection and that tuberculosis of later life is a disease modified by acquired immunity. He compares in the first place the tuberculosis of infancy and early childhood with that seen in adults. In

the former the tuberculosis resembles that produced experimentally in susceptible animals, such as the guinea-pig. A focus of infection is rapidly followed by tuberculosis of the lymphatic glands, situated in the direction of the lymph flow, and the disease may progress with much greater rapidity in the lymphatic glands than at the primary site of invasion. The primary focus may occasionally be so small or retrogress so far that it becomes unrecognizable. In adults tuberculosis is a chronic disease that proceeds slowly, often with cavity formation, but at the same time with a tendency to heal, indicated by the production of fibrous tissue. In sharp contrast with the tuberculosis of early childhood, it remains for a long time localized in the parenchyma of the lung and, even though a whole lobe is implicated, the lymphatic glands at the hilum manifest none of the characteristic changes of tuberculosis.

Passing on to the reasons for the observed facts, Opie points out that if an attempt be made to determine the significance of the widespread prevalence of minor tuberculous infections, demonstrated by the lesions found in the bodies of those who die from causes other than tuberculosis, and by the corresponding frequency with which children react to tuberculin, there are two important questions to be answered. These are: What are the nature and the limitations of the immunity conferred by infection? What correlation exists between sensitization to tuberculin and immunity against the disease? He explains that resistance, though materially increased by the first infection, is readily overcome by increasing the reinfecting dose; such resistance is transient and disappears after recovery from infection and the degree of resistance conferred by inoculation increases with the virulence of the microorganism used. Opie states that there is no adequate understanding of the nature of the limited immunity of the tuberculous animal against reinfection. He also states that agglutinin and complement fixing and bacteriotropic antibodies "make their appearance" in the blood serum, but that it has not been possible to determine exactly what part they play in the destruction of tubercle bacilli. He does not state, as Camac Wilkinson does, that the essential struggle takes place in the tissues and not in the blood—"the focus of the disease is the main power house for the defensive antibodies." In a paper published in this journal in February, 1924, Camac Wilkinson referred to Klemperer's experiment as showing that the reactions of immunity require the presence of the tuberculous focus and fail entirely if the focus of the disease is completely extirpated. He said that if the blood produced the antibodies, opsonins and bacteriolysins should be in evidence in the blood. He added that without the focus of the disease the supply of bacteriolysins largely ceased. Immunity in tuberculosis is cellular and not humoral. Opie cannot give an answer to his first question as to the nature and limitations of the immunity con-

¹ *The American Journal of the Medical Sciences*, January, 1930.

ferred by infection. In connexion with his second question, that of the correlation between sensitization to tuberculin and immunity against the disease, he states that the paradox of hypersensitiveness and immunity is apparent and not real. Hypersensitiveness to him is in great part at least the heightened capacity of the tissues to react with acute inflammation and he regards the tuberculin reaction as an acute inflammatory reaction. The local inflammatory reaction is in his opinion an effective means for the protection of internal organs, and inhibition of dissemination is one of the most conspicuous features of the disease in adults who have sustained the usual infection of childhood. It is interesting to note that in discussing a possible analogy between sensitization to foreign protein and the hypersusceptibility of the tuberculous animal to tuberculin, he states that the analogy is not complete, for in the latter the intervention of an antibody, as shown by passive sensitization, has not been satisfactorily demonstrated. He adds that at the same time the analogy is supported from another point of view, for the animal sensitized by tuberculous infection has the ability, not possessed by a normal animal, to fix tubercle bacilli at their site of entry.

Opie's discussion is full of interest and gives much food for thought. He has dealt with clinical manifestations of tuberculosis and has tried to explain the clinical facts connected with the reinfection of adults. Much more work must be done on immunity in tuberculosis before all the questions raised by him can be solved. What he has done is to draw attention to the reinfection of adults by the tubercle bacillus. He describes the conception as just beginning to find its way into text books of medicine and pathology. It is a new conception in that the partial immunity produced in infancy and childhood has not hitherto received much consideration. Phelébon has estimated that in the large cities of the world 90% of inhabitants have been infected by the time they reach the age of fifteen years and that 31% to 66% have been infected in country villages at the same age. If this high proportion be taken as approximately correct it cannot be presumed that tuberculosis attacks only those adults who have had tuberculous infections in early life. The manifestations of the activity of the tubercle bacillus are so extraordinary that sight must not be lost of the effect of possible variation in the virulence of the microorganism. The typical tuberculous infection should be regarded as that occurring in a person who has never before become infected, whether that person be infant or adult. Reinfection of adults will then have to be explained in terms of cellular immunity. In these circumstances measures of control will be regarded in their proper sequence—preventive measures for the elimination of and avoidance of sources of infection will be the primary consideration and vaccination of infants in the manner of Calmette, if this should ultimately be proved effective, will be the second line of defence.

VARIATIONS IN THE BLOOD SUGAR CONTENT.

SOME observations of interest have recently been made by J. Shirley Sweeney into the twenty-four hour variations in the blood sugar content in fasting and non-fasting subjects.¹ Studies of blood sugar variations have previously been made in diabetic and non-diabetic persons. Sweeney has endeavoured to confirm in part the findings of Jonas, Miller and Teller in this regard. The subjects used for the observations were medical students, free from organic disease. Blood sugar determinations were made by the Folin-Wu method every two hours. In the fasting group the curve for twenty-four hours was practically flat; there was a very slight rise in the early morning which continued until noon and then dropped. In the non-fasting group there was a somewhat insignificant rise after the evening meal with a flat curve through the night. After breakfast there was a sharp rise followed by a short decline. There was a rise after the midday meal with a subsequent definite drop which was only slightly affected by the evening meal. The nature of the food taken is not stated. Sweeney explains these results. Food stimulates the production of endogenous insulin. When the morning meal is taken, the pancreatic tissue concerned in carbohydrate metabolism has been at rest, the insulin response is sluggish and there is a sharp rise in blood sugar. After the mid-day meal the insulin response is slightly more active and after the evening meal its activity is greatest; the blood sugar level is correspondingly low. These observations, he states, show that in mild diabetes a single dose of "Insulin" must be given before breakfast. "Insulin" reactions should be expected in the early afternoon or evening. The totally diabetic will require more injections during the day. The functioning tissue of a diabetic must be used to the greatest advantage.

TECHNICAL METHODS IN MEDICAL MUSEUMS.

PATHOLOGISTS in charge of medical museums are always ready and anxious to receive suggestions as to the way in which specimens may be prepared and mounted to the best advantage. The twelfth number of the *Journal of Technical Methods and Bulletin of the International Association of Medical Museums* has been received. Pathologists and those in charge of medical libraries may not be aware of the value of this publication or even of its existence. For this reason we gladly accede to the request of Dr. Maude E. Abbott, the editor, that the attention of readers be drawn to it. In the twelfth number will be found articles on museum technique, injection methods, photographic methods, microscopical technique, bacteriological technique and so forth. This journal cannot be regarded as other than indispensable to those in charge of laboratories or to those who preserve their own specimens.

¹ Archives of Internal Medicine, February, 1930.

Abstracts from Current Medical Literature.

GYNÆCOLOGY.

Carcinoma of the Cervix.

VICTOR BONNEY (*The Lancet*, February 8, 1930) discusses surgical treatment of carcinoma of the cervix. He has performed the Wertheim operation three hundred and eighty-two times since the year 1907. Of this number two hundred and forty-eight were performed by the end of 1924. He examines this number on the basis of five years' freedom from recurrence. Forty-seven patients or 16.5% died as a result of the operation, 107 suffered from recurrence before five years had elapsed, 12 were lost sight of before the end of five years, eight died of other diseases during the five-year period and 110 were well at the end of five years. The author points out that with increasing experience and technical skill the operative mortality becomes less. From 1907 to 1915 he performed 110 operations with 22 deaths, a mortality of 20%; from 1916 to 1924 he performed 174 operations with 25 deaths, a 14.3% mortality; between 1925 and 1929 the operations numbered 98 with eight postoperative deaths, a mortality of 8.1%. He discusses the question of the cause of postoperative deaths. In the first place the severity of the operation is a smaller factor than are the conditions of the general health of the patient and of those found at the site of the growth. A large proportion of patients with cancer of the cervix are in very poor health, quite apart from the growth. The author believes that few patients become affected by this form of cancer until their general condition from other causes has considerably deteriorated. The average age of the patients is in the neighbourhood of fifty years. Of his 382 patients 14 were over sixty years of age and three over seventy; 23 were under thirty-five years of age. Of the younger patients not more than one or two were in normal health, apart from their disease. The local condition is not less important. Most cancers of the cervix are heavily infected by the time the patient seeks advice. On more than one occasion the author has found infection by the organisms of gas gangrene. Of the 55 patients in the whole series who died as a result of operations, 20 died from traumatic shock, five from hæmorrhagic shock, 13 from septic shock, two from general sepsis, three from pyelonephritis, one from thrombosis of the femoral artery, two from secondary hæmorrhage, three from parietic obstruction, two from peritonitis, two from embolism and one each from suppression of urine and the effects of the anæsthetic. The author refers to a paper published by himself in 1929 in which he stated that the largest number of cures of carcinoma of the cervix were to be

obtained by operating on those whose tumours were operable, and by treating the remainder with radium. By surgical means some attempt may be made to treat patients whose lymphatic glands are involved; radium is useless for these. He deprecates as premature the appeals which have been made to younger surgeons to use radium therapy and not to adopt operative treatment.

The Operative Treatment of Endometriomata.

CHARLES D. READ AND FREDERICK ROQUES (*Proceedings of the Royal Society of Medicine*, September, 1929) discuss the after results of the operative treatment of endometriomata in the light of their treatment of forty-one patients. They describe the results of their operative treatment as satisfactory, but hold that there is a definite field for the use of radium. Operative treatment is either conservative or radical, depending on complete removal or otherwise of ovarian tissue. They discuss the factors which should influence the choice of method in any given case. The younger the patient, the stronger is the indication for conservative treatment, except in those with large tumours accompanied by extensive infiltration of surrounding structures. The extent of the lesion influences the decision between conservative treatment on the one hand and radical and radium treatment on the other. Conservative treatment is indicated for a limited growth in young patients, radical treatment for all extensive lesions in patients over thirty-eight years of age, especially in the presence of symptoms due to mechanical disturbances. Radium is a useful adjunct when the tumour is inoperable or when radical treatment has failed. In discussing the question of site of the tumour, the authors state that ovarian endometriomata lend themselves to both forms of surgical treatment, the choice depending on the factors already mentioned. Uterine endometriomata should be treated in a similar way, the governing principles of age, extent and parity being remembered. Local excision is less frequently possible than with ovarian tumours. Endometriomata in the recto-vaginal space, if accompanied by uterine or ovarian involvement, demand radical operative treatment. Localized tumours in this situation lend themselves to both local excision and radium therapy. Endometriomata in scars or in the region of the umbilicus are satisfactorily treated by local excision. Radium treatment is a possible alternative; its use has not yet been exploited.

Fibroma of the Vulva.

LEO BRADY (*Archives of Surgery*, December, 1929) reports the occurrence of a fibroma of the vulva containing an epithelial inclusion cyst. The patient was a married woman, aged thirty-three years. Ten years before she was seen by the author, she had noticed a small lump in the groin;

this had gradually increased in size. Six weeks before she was seen, the tumour had been severely squeezed between two metal objects; it had become tender, red and swollen. The tumour was removed by operation. The fibroma could not be traced directly into the inguinal canal. The fact that it arose from a point directly over the external inguinal ring just where the extraperitoneal portion of the round ligament breaks up into its terminal fibres, made it appear likely that the growth arose from these fibres. It is supposed that the epithelial inclusion which was lined by several layers of squamous epithelium, was the result of the trauma, when a strip of skin was forced down into the trauma and continued to grow there.

OBSTETRICS.

The Effect of Radium and X Ray Irradiation Upon Pregnancy.

D. P. MURPHY (*The American Journal of Obstetrics and Gynecology*, August, 1929) makes a report of six hundred and sixty-five pregnancies in women who had been subjected to treatment by radium or irradiation. The length of pregnancy and the health and development of the subsequent children were studied. Irradiation before conception may be followed by the birth of unhealthy or defective children, but it cannot be laid down that such maternal treatment necessarily has a detrimental effect upon subsequent children. Irradiation of the pregnant woman, however, is likely to be followed by the birth of seriously defective children. These defects conform to types of which the microcephalic is the most common. It is suggested that they are the result of irradiation of the embryo. The author suggests that curettage should precede irradiation of the female pelvis in order to avoid injury to a possible embryo. The author is strongly of the opinion that the pregnant uterus should never be subjected to radiotherapeutic exposures and that if a growing embryo is unwittingly exposed to irradiation and its existence, discovered later on, the pregnancy should be terminated.

Effects of Pregnancy on the Circulation of the Blood.

J. C. BEKER (*The American Journal of Obstetrics and Gynecology*, September, 1929) discusses in detail the normal changes in the maternal circulation due to pregnancy, labour and the puerperium, especially in relation to the toxæmia of pregnancy. Under normal conditions the circulatory system adapts itself to altered demands by an increase in the total amount of blood, by enlarged output and by peripheral vaso-constriction to keep the blood pressure constant. Labour may push the functions of the circulation to their physiological limits. The heart must be capable of enlarging, peripheral arteries must be

able to undergo constriction, the arteries of the uterus must adequately hypertrophy, the uterine muscle must remain in a state of tension without interfering unduly with the flow of blood. Complications may arise from any of these factors. The necessary vaso-constriction may seriously affect the circulation in other organs, especially the kidneys. Injection of the arteries of the pregnant uterus of cows and X ray photographs thereof show that in the multiparous animal the arteries are of a considerably larger calibre than in the primiparous. Too high a tonus of the uterine muscle means too high a resistance in that part of the circulation causing in turn cardiac enlargement and vaso-constriction at the periphery. An insufficiently developed or unduly thinned uterine wall will thus cause definite vaso-constriction, even to the extent of cessation of function or of anatomical integrity of the organs involved and in the latter part of pregnancy represents a long-standing and chronic condition. The author considers that the resulting hypertension and other symptoms and signs usually attributed to a toxæmia may be due entirely to the causes enumerated and not due to the presence of any actual toxic substance.

Torsion of the Omentum.

K. SCHWANK (*Münchener Medizinische Wochenschrift*, December 13, 1929) describes a case of torsion of the omentum during pregnancy which presented great difficulties in diagnosis. Acute pain was felt in the lower part of the abdomen with tenderness and resistance in the region of the appendix. On vaginal examination a tender swelling in the right fornix could be palpated. A diagnosis of appendicitis or torsion of the pedicle of the right ovary was made. Most omental torsions occur in association with irreducible hernia or in the sac after the bowel has been reduced. A perusal of the literature shows that all true abdominal torsions have been diagnosed as appendicitis or cholecystitis. The acute abdominal symptoms do not fit in with a practically normal temperature and pulse and an unaltered blood sedimentation test. The latter in association with the gynaecological findings usually leads to a diagnosis of twisted ovarian pedicle.

Early Diagnosis of Pregnancy.

G. A. WAGNER (*Deutscher Medizinische Wochenschrift*, December 20, 1929) and other German observers contribute a symposium on their experiences with the Aschheim-Zondek test in the early diagnosis of pregnancy. Virgin mice weighing not more than six to eight grammes were used and the amount of urine injected was from 1.2 to 2.4 cubic centimetres spread over six injections within forty-eight hours. On the fifth day the mice were killed and the ovaries inspected for hæmorrhagic spots and corpora lutea which alone constitute a positive result. Normal healthy

women, those at the menopause or others with amenorrhœa not due to pregnancy did not give a positive reaction. In a series of 548 non-pregnant women only four gave positive results—an aged woman with cystitis, two women with carcinoma and one man whose urine was accidentally included. Tests before and after this result failed completely to give a reaction. In 459 normal pregnancies the reaction was positive in 98.26%. The author considers that the test is of the greatest value in the differentiation of pregnancy from soft cystic fibro-myomata and illustrates his belief with several cases. Patients with ectopic pregnancy give a positive result as long as the ovum is alive. Unfortunately the test is of no value in the differential diagnosis of tubal abortion and inflammatory lesions of the tubes. In vesicular mole the reaction is positive and assists in the diagnosis from hydramnios. It tends to remain positive for a longer period after the uterus is cleared out than in normal pregnancies. When a fresh pregnancy can be excluded, the return of a positive reaction after a phase of no reaction is strongly suspicious of chorion epithelioma.

Serum Protein in the Vomiting of Pregnancy.

V. J. HARDING AND H. B. VAN WYCK (*The Journal of Obstetrics and Gynecology of the British Empire*, Autumn Number, 1929) publish the results of a series of blood analyses which they have carried out in order to investigate the problem as to whether dehydration or ketonuria be the determining factor in the high uric acid content of the blood plasma in the vomiting of pregnancy. In other conditions the plasma or serum proteins have been used as an index of the state of blood dehydration. The authors determined the serum proteins refractometrically, using the conversion table of Reiss. Tables are given showing, first, the range of serum protein in twenty-seven patients with vomiting of pregnancy on recovery; secondly, the range of serum protein in fifty-five patients with vomiting of pregnancy on admission; thirdly, the percentage of serum protein resulting from ketonuria-producing diets in pregnancy; fourthly, the values of serum protein in vomiting of pregnancy during treatment. In general the serum proteins are found to be concentrated in the presence of vomiting; mild vomiting and normal serum proteins are not necessarily associated. Patients with symptoms equally slight and recovering equally quickly may be found to possess a raised serum protein value. Comparing the patients in whom ketonuria was produced, with patients on recovery and on admission, the authors conclude that the general high level of the serum proteins in the patients on admission indicates concentration presumably brought about by loss of fluid consequent on the vomiting. If dehydration and protein

destruction proceed together, the serum protein value may fall to a subnormal figure. The authors also conclude that the occurrence of a high serum protein value is a good prognostic sign and low values are of grave import.

Result of an Explosion of Ethylene.

REUBEN PETERSON (*American Journal of Obstetrics and Gynecology*, November, 1929) reports a case in which there was an explosion in the maternity ward of the University of Michigan Hospital during the administration of ethylene, which unfortunately resulted in the death of the mother and child. The patient was well advanced in the second stage of labour when ethylene-oxygen anaesthesia was given. The mixture employed in a McKesson apparatus was ethylene and oxygen, 25% of the former and 75% of the latter. The practice was to ask the patient to breathe deeply three times at the beginning of the pains. The mask was then removed from the face and the patient was urged to bear down. The explosion occurred during the second stage. It was violent and loud enough to be heard throughout the four-storied building. The anaesthetist was partly blown from her chair, but she escaped serious injury. The gas machine was seen to be on fire, but the flames were quickly extinguished. Immediately following the explosion the patient cried out and attempted to rise into a sitting posture. After lying down she coughed up large quantities of foamy blood and became unconscious and rapidly died. The patient's neck was greatly swollen and distorted by emphysema. The patient died in about three-quarters of an hour. The fetal head receded greatly; the fetal heart could not be heard. The foetus was extracted with forceps with ease, but it showed no signs of life. The post mortem findings were multiple lacerations of the trachea, the lower bronchi and parenchyma of the lungs, interstitial emphysema of the upper half of the body, fatty degenerative infiltration of the liver, acute congestion of all organs and edema of the meninges and brain. After reviewing all the facts surrounding the occurrence, the author arrives at the following conclusion: Ethylene is an exceedingly inflammable and explosive gas when mixed with oxygen or ether. Explosions may occur in the use of this anæsthetic through electrostatic charges, unless extraordinary precautions are taken to see that everything that has to do with the anæsthetic machine and surroundings is "grounded." Even then there is a possibility of an explosion from within the gas machine, as it is at present built. It would seem best to return to the use of nitrous oxide-oxygen and of ether given by the drop method, no ether mixture being allowed in the gas machine. The open mask administration of ether is best for analgesia and anaesthesia in the second stage of labour.

British Medical Association News.

ANNUAL MEETING.

THE ANNUAL MEETING OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION was held at the Royal Society's rooms, 5, Elizabeth Street, Sydney, on March 20, 1930. DR. F. BROWN CRAIG, President, was in the chair.

ANNUAL REPORT OF THE COUNCIL.

The Honorary Secretary presented the annual report of the Council and moved that it be received. The motion was seconded by Dr. Andrew Davidson and carried. The report is as follows.

The Council presents the following report on the work of the Branch for the year ended March 20, 1930.

Membership.

The membership of the Branch is now 1,711, as compared with 1,699 at the date of the last report, showing a net increase of 12.

The additions have included elections and resumptions of membership, 71; removals into the area of the Branch, 46. The losses have included resignations, 12; removals out of the area of the Branch, 32; default in payment of subscription, 39; deaths, 22.

The losses by death have been: Dr. C. A. Verge, Dr. B. J. Newmarch, Dr. L. W. Roberts, Dr. T. B. Walley, Dr. J. F. Walton, Dr. D. G. Robertson, Dr. J. J. Kelly, Dr. E. P. Sinclair, Dr. H. J. Marks, Dr. A. P. Wall, Dr. H. Busby, Dr. A. Murray Oram, Dr. R. B. Trindall, Dr. F. H. B. Gaden, Dr. G. H. Bohrmann, Dr. W. D. Langton, Dr. P. N. Aiken, Dr. T. W. W. Burgess, Dr. C. H. Clatworthy, Dr. H. W. Armit, Dr. E. H. Thane, Dr. W. C. Grey.

Meetings.

Ten ordinary meetings of the Branch (including the Annual Meeting), one extraordinary meeting and seven clinical meetings were held. The average attendance was 53. Six of the ordinary meetings, as follows, were held in conjunction with meetings of Sections, namely: May 2, with the Section of Obstetrics and Gynaecology; May 30, with the Section for the Study of Cancer and the Section of Surgery; June 27, with the Section of Orthopaedics and the Section of Pathology and Bacteriology; July 25, with the Section of Paediatrics, the Section of Orthopaedics, and the Section of Radiology; September 26, with the Section of Medical Literature and History; October 31, with the Section of Medicine and the Section of Obstetrics and Gynaecology. The ordinary meeting of November 28 was held in conjunction with the Veterinary Association of New South Wales.

The extraordinary meeting of November 7 was convened to give members an opportunity of hearing an address by Sir Charles Ballance, K.C.M.G., K.B., M.V.O., F.R.C.S., on "Some Operations on the Brain."

The clinical meetings were held at the Broughton Hall Psychiatric Clinic, the Royal Prince Alfred Hospital (two), the Royal North Shore Hospital, the Sydney Hospital, Saint Vincent's Hospital, and the Royal Alexandra Hospital for Children.

The business of the meetings during the year included twenty-three papers and addresses, numerous reports of cases, exhibits, lantern demonstrations and, at the ordinary meeting of December 5, the screening of a cinema film, "William Harvey and the Circulation of the Blood," kindly made available by Dr. E. Rowden White, of Melbourne. On this occasion a collection of books and pictures of the period was also shown.

Representatives.

The Branch was represented as follows:

- (a) *Council of the British Medical Association* (1929-1930): Sir T. Jenner Verrall, LL.D. (died October 4, 1929). Sir Jenner Verrall had represented the New South Wales-Queensland group of Branches in the Council of the Association since the year 1921. Advice of his death was received with great regret.

- (b) *Representative Body* (1929-1930): Representative, Dr. R. L. Davies, O.B.E.
 (c) *Federal Committee*: (1929) Dr. J. A. Dick, C.M.G., Dr. R. H. Todd; (1930) Dr. J. A. Dick, C.M.G., Dr. R. H. Todd.
 (d) *Australasian Medical Publishing Company, Limited*: Dr. George Armstrong, Dr. T. W. Lipscomb, Dr. F. P. Sandes.
 (e) *Council of the Bush Nursing Association* (1929-1930): The President, Dr. F. Brown Craig.
 (f) *Council of the Royal Society for the Welfare of Mothers and Babies*: Dr. R. B. Wade, Dr. A. J. Gibson.
 (g) *Board to Control Campaign against Tuberculosis*: Dr. S. A. Smith.

Council.

(a) The attendance of the members of the Council and of the standing committees was as set out in the table on the next page.

(b) The representatives of the Local Associations of Members, appointed on the invitation of the Council to attend the regular quarterly meetings of the Council, were as follows: Dr. W. Brodie Grant (Balmmain District), Dr. K. S. Macarthur Brown (Central Western), Dr. A. M. Gledden (City), Dr. F. O. Stokes (Eastern District), Dr. Hugh Hunter (Eastern Suburbs), Dr. W. F. Simmons (Illawarra Suburbs), Dr. D. G. Hunter (Kuring-gai District), Dr. F. S. Stuckey (Northern District), Dr. A. M. Davidson (South Sydney), Dr. J. Brooke Moore (Western), Dr. A. M. McIntosh (Western Suburbs).

Appointment of Medical Secretary.

In order to cope with the increased activities of the Branch coming about in the ordinary way of growth and development, and those resulting from legislation in recent years in matters affecting the medical profession, and with the object in view of ensuring continuity in the administration, the office of Medical Secretary was created. Applications for the position were invited from members of the profession in all the States; and the Council had the satisfaction of being able to announce the appointment of Dr. J. G. Hunter to the position. Dr. Hunter entered on his office on June 17, 1929; and the Council now realizes that the members throughout the State recognize the value of his work and are gratified that he was able to accept the position.

Library.

Dr. J. A. Dick was again appointed to the position of Honorary Librarian. Donations of books and periodicals were received from the Australasian Medical Publishing Company, Limited, Mr. George Faithfull, Dr. T. Storie Dixon, Dr. R. H. Todd, Mr. A. W. Green, Sir Charles Clubbe and Dr. Garnet Halloran; and Dr. J. A. Dick kindly presented a copy of Webster's Universal Dictionary (1926).

Donations of journals were made to the Department of Public Health, the Library of the Sydney Technical College, the Public Library of New South Wales and the Library of the Medical School, University of Otago, New Zealand.

A large number of books and journals are at present in store, pending their restoration to the shelves of the library in the new building.

Affiliated Local Associations of Members.

The following is a list of the Local Associations of members and their Honorary Secretaries:

- Balmmain District: Dr. H. C. Barry (Balmmain).
 Border: Dr. R. Affleck Robertson (Albury).
 City: Dr. H. A. Ridler (219, Macquarie Street, Sydney).
 Central Northern: Dr. A. T. Roberts (Newcastle).
 Central Southern: Dr. J. H. Coles (Goulburn).
 Central Western: Dr. K. S. Macarthur Brown (Parramatta).
 Eastern District: Dr. R. A. Rankine (Kempsey).
 Eastern Suburbs: Dr. Hugh Hunter (Waverley).
 Illawarra Suburbs: Dr. G. F. L. Elliott (Carlton).
 Kuring-gai District: Dr. F. A. E. Lawes (Hornsby).
 Northern District: Dr. R. J. Jackson (Armidale).

North Eastern: Dr. A. J. Opie (Lismore).
 Southern District: Dr. C. R. Sim (Wagga).
 South Eastern: Dr. C. P. Jackson (Wollongong).
 South Sydney: Dr. P. S. Hunt (Redfern).
 Warringah District: Dr. E. L. Newman (Mosman).
 Western: Dr. S. R. Dawes (Orange).
 Western Suburbs: Dr. W. M. A. Fletcher (Haberfield).

Annual Meeting of Delegates.

The seventeenth annual meeting of the delegates of the affiliated Local Associations of members with the Council was held on August 30, 1929, at the Conference Hall, 9th Floor, Savings Bank Building, 21, Elizabeth Street, Sydney. An account of the meeting appeared in THE MEDICAL JOURNAL OF AUSTRALIA of November 2, 1929, at page 651, and a report of the proceedings was sent to the several Local Associations. The delegates present at the meeting were as follows: Dr. A. W. Mobbs (Balmmain District), Dr. A. T. Roberts (Central Northern), Dr. G. A. Buchanan (Central Southern), Dr. K. S. M. Brown (Central Western), Dr. A. M. Gladden (City), Dr. A. Muscio (Eastern District), Dr. H. Hunter (Eastern Suburbs), Dr. W. F. Simmons (Illawarra Suburbs), Dr. L. Cowlishaw (Kuring-gai District), Dr. A. G. Brydon (Northern District), Dr. O. A. Diethelm (North Eastern), Dr. C. P. Jackson (South Eastern), Dr. N. J. Mackay (South Sydney), Dr. S. R. Dawes (Western), Dr. E. P. Blashki (Warringah District), Dr. R. W. W. Walsh (Western Suburbs).

Sections for the Study of Special Branches of Medical Knowledge.

(a) Pædiatrics (inaugurated October 4, 1921): *Chairman*, Dr. P. L. Hipsley; *Honorary Secretaries*, Dr. F. C. Rogers and Dr. M. J. Plomley. Membership 38. Meetings were held on March 14 (annual), May 24, June 28, July 25 (in conjunction with the Branch, the Section of Orthopædics and the Section of Radiology), and November 1.

(b) Hygiene and Preventive Medicine (inaugurated January 3, 1922): *Chairman*, Dr. R. Dick; *Honorary Secretary*, Dr. E. S. Morris. Membership, 14.

(c) Orthopædics (inaugurated May 7, 1923): *Chairman*, Dr. C. Nigel Smith; *Honorary Secretary*, Dr. J. Hoets. Membership, 19. Meetings were held on February 28, April 24, May 9, June 24, June 27 (in conjunction with the Branch and the Section of Pathology and Bacteriology), July 4, December 12 (annual).

(d) Pathology and Bacteriology (inaugurated April 3, 1924): *Chairman*, Dr. F. S. Hansman; *Honorary Secretary*, Dr. A. J. Fitzgerald. Membership, 18. Meetings were held on March 21 (annual), June 27 (in conjunction with the Branch and the Section of Orthopædics) and November 21.

(e) Neurology and Psychiatry (inaugurated June 4, 1924): *Chairman*, Dr. A. Davidson; *Honorary Secretary*, Dr. J. A. L. Wallace; *Honorary Medical Secretary*, Dr. R. A. Noble. Membership, 50. Meetings were held on March 4, March 22 (in conjunction with the Section of Medicine), March 25, April 11, August 8 (in conjunction with the Section of Medicine), August 25, November 20.

ATTENDANCES AT COUNCIL AND AT STANDING COMMITTEE MEETINGS.

	Council.	Committees.					
		Executive and Finance.	Organization and Science.	Medical. Politics.	Hospitals.	Ethics.	Post-Graduate Work.
Dr. J. E. V. BARLING (Past President)	9	15	5	—	—	10	—
Dr. GEORGE BELL, O.B.E.	7	15	—	—	—	—	—
Dr. W. J. BINNS ¹	5	—	—	7	2	—	—
Dr. C. B. BLACKBURN, O.B.E.	5	—	—	—	—	10	—
Dr. W. H. CRAIG (Honorary Treasurer and Premises Attorney)	9	17	11	7	3	10	4
Dr. F. BROWN CRAIG (President)	9	18	6	8	5	3	4
Dr. ANDREW DAVIDSON	9	—	—	—	—	12	—
Dr. J. A. DICK, C.M.G. (Honorary Librarian)	7	16	—	7	—	—	—
Dr. L. W. DUNLOP	8	—	—	—	4	10	—
Dr. A. J. GIBSON (Honorary Medical Secretary)	7	—	10	—	—	—	6
Dr. J. GOODWIN HILL	6	—	—	10	—	—	—
Dr. E. M. HUMPHERY (President Elect)	8	11	7	8	3	8	7
Dr. J. G. HUNTER (Medical Secretary)	8	12	11	12	4	8	8
Dr. C. H. E. LAWES	5	4	—	10	1	—	—
Dr. T. W. LIPSCOMB	8	13	—	10	—	—	—
Dr. R. J. MILLARD, C.M.G., C.B.E.	7	11	—	—	—	—	—
Dr. A. A. PALMER	8	—	—	—	—	10	—
Dr. S. A. SMITH	4	6	1	—	—	—	—
Dr. R. H. TODD (Honorary Secretary)	9	16	11	7	5	11	4
Dr. R. B. WADE	8	14	—	—	5	—	—
Meetings held	9	18	11	12	5	12	
							Dr. V. M. COPPLESON .. . 8
							Dr. W. EVANS .. . 5
							Dr. W. W. INGRAM .. . 2
							Dr. E. H. M. STEPHEN .. . 8
							Dr. A. S. WALKER .. . 5
							Meetings held .. . 8

¹ Absent owing to illness since September, 1929.

(f) Oto-Rhino-Laryngology (inaugurated June 11, 1924): *Chairman*, Dr. H. J. Marks (deceased), Dr. H. S. Marsh; *Honorary Secretary*, Dr. A. O. Davy. Membership, 27. Meetings were held on May 5, June 26 (in conjunction with the Section for the Study of Cancer), December 2 (annual).

(g) Medicine (inaugurated October 1, 1924): *Chairman*, Dr. Sinclair Gillies; *Honorary Secretary*, Dr. E. H. Stokes. Membership, 31. Meetings were held on August 8, October 31 (in conjunction with the Branch and the Section of Obstetrics and Gynaecology), December 12 (annual).

(h) Medical Literature and History (inaugurated June 26, 1925): *Chairman*, Dr. R. Scot Skirving; *Honorary Secretary*, Dr. L. Cowlshaw. Membership, 28. Meetings were held on June 6 and September 26 (in conjunction with the Branch).

(i) Surgery (inaugurated July 30, 1925): *Chairman*, Dr. George Bell; *Honorary Secretary*, Dr. T. Farranridge. Membership, 30. Meetings were held on May 30 (in conjunction with the Branch and the Section for the Study of Cancer), and July 4.

(j) Obstetrics and Gynaecology (inaugurated August 6, 1925): *Chairman*, Dr. W. C. McClelland; *Honorary Secretary*, Dr. H. A. Ridler. Membership, 51. Meetings were held on March 20, May 2 (in conjunction with the Branch), June 21, August 21, October 31 (in conjunction with the Branch and the Section of Medicine), November 20.

(k) Radiology (inaugurated December 3, 1926). *Chairman*, Dr. H. R. Sear; *Honorary Secretary*, Dr. M. Frizell. Membership, 19. Meetings were held on July 25 (in conjunction with the Branch, the Section of Paediatrics and the Section of Orthopaedics).

(l) Genito-Urinary and Venereal Diseases (inaugurated August 7, 1928): *Honorary Secretary*, Dr. P. Fiaschi.

(m) Cancer (inaugurated October 10, 1928): *Chairman*, Dr. H. G. Chapman; *Honorary Secretary*, Dr. H. M. Moran. Membership, 32. Meetings were held on April 18, May 30 (in conjunction with the Branch and the Section of Surgery) and December 3. The Section has cooperated with the Cancer Research Committee of the University of Sydney.

British Medical Association Lectures.

In pursuance of the resolution of the Council of January 5, 1926, which established a system of lectures of a distinctive character on scientific and clinical subjects to be delivered at meetings of Local Associations outside the metropolitan area, British Medical Association lectures were arranged as follows:

North Eastern Medical Association, Lismore, April 6, 1929, Dr. F. A. H. Michod: "Some Ante-natal Problems."

Northern District Medical Association, Armidale, August 21, 1929, Dr. L. G. Teece: "Fractures of the Wrist and Ankle Joints."

Other lectures were arranged, namely:

Western Medical Association, Wellington, June 26, 1929, Dr. V. M. Coppleston: "The Treatment and Management of Head Injuries and Fracture of the Skull."

Central Southern Medical Association, Canberra, August 23, 1929, Dr. R. V. Graham: "The Present State of Vaccine Therapy in Practice."

Northern District Medical Association, Manilla, December 11, 1929, Dr. W. Evans: "Recent Advances in 'Diseases of the Chest'."

Post-Graduate Courses.

Progress has been made with the work of organizing post-graduate courses. Arrangements have now been made for holding a refresher course for general practitioners at the main metropolitan hospitals (clinical schools) from May 26 to June 7, 1930, also for weekly clinical demonstrations (open rounds) throughout the year and courses in special subjects from time to time.

It is gratifying to know from Professor R. S. Wallace, the Vice-Chancellor, that the organization of post-graduate study in medicine by the Association will receive recognition from the University; and that, when the time arrives for instituting courses in which the cooperation of the

University is required, the necessary arrangements can be proceeded with forthwith; also that the teaching staff will be available for giving the instruction.

Federal Committee.

The Federal Committee of the British Medical Association in Australia met in Melbourne on April 10, 1929, and in Sydney on September 2, 1929. Reports of the proceedings of the Committee were published in THE MEDICAL JOURNAL OF AUSTRALIA of May 4, 1929, at page 600, and of October 19, 1929, at page 586 respectively.

The Council noted with deep regret the death on April 19, 1929, of Sir George Syme, K.B.E., the Chairman of the Federal Committee. A representative of the New South Wales Branch attended the funeral in Melbourne on April 20, and a tribute to George Adlington Syme, written by Dr. F. P. Sandes, was read at a memorial meeting held in Melbourne on May 12.

Australasian Medical Congress (British Medical Association).

The Third Session of Congress was held in Sydney at the University, Monday, September 2, to Saturday, September 7, 1929, under the presidency of Dr. G. H. Abbott. It was a large assembly of members of the Branches of the Association in Australia and New Zealand, totalling 952, 600 of whom were members of the New South Wales Branch. Dr. A. A. Palmer and Dr. T. W. Lipscomb were the Joint Honorary Secretaries and Dr. W. H. Crago the Honorary Treasurer. It is to their careful organization and management that the great success of the Congress was largely due. Congress was honoured by the presence of Sir Ewen Maclean, M.D., F.R.C.P., F.R.S.E., the retiring President of the British Medical Association. He was the official representative of the British Medical Association, and journeyed to Australia solely for the purpose of the meeting. His visit was very much appreciated. To his distinguished personality and great learning he added an intimate knowledge of the medical profession and of the work of the Association in which he has taken an active and prominent part for so many years.

The Transactions of Congress have already been printed and distributed to members of Congress.

The Medical Journal of Australia.

THE MEDICAL JOURNAL OF AUSTRALIA has maintained the high standard it has established for itself as a medical journal. The valuable assistance given by the Editor and Assistant Editor of the Journal and the Manager of the Printing House throughout the whole period of organizing the Medical Congress in Sydney and in the work of the Sections and various entertainments during the Congress was very much appreciated. It is satisfactory to note that the members are in an increasing degree looking to the Printing House for their printing and stationery requirements.

By the sad death of Dr. Henry William Armit, the Editor of THE MEDICAL JOURNAL OF AUSTRALIA, which took place after a short illness on March 12, 1930, the New South Wales Branch has lost a valuable and distinguished member. From the time of his coming to Sydney from England in 1914, he took a great interest in the work of the Branch; and his advice and guidance were frequently sought not only by individual members, with a large number of whom he seemed to be always in touch, but by the Council and its committees.

Premises.

The new premises of the Branch, to be called the British Medical Association House, in Macquarie Street, Sydney, are making steady progress towards completion under the watchful care of the architects, Messrs. Fowell and McConnel. They are expected to be ready for occupation, as anticipated, in May next. The building is a noble one which excites the admiration of all who see it. The builders, Messrs. Hutcherson Brothers, have been unflagging in their efforts to complete the work within the contract

time. Messrs. Hardie and Gorman, the estate agents, into whose hands the management has been placed, report steady progress with the letting. All suitable services have been provided for, including a hot water service, central heating for every room, electric bell service and letter chutes. These will make for the satisfaction and convenience of the members and other tenants. The library, council and committee meeting rooms and the offices show promise of being admirably adapted to their several purposes; and the assembly hall, which is on the ground floor occupying its western portion, is already so far advanced in construction and equipment as to make it clear that it will not only be a dignified and comfortable place for our meetings, but will be free of echo and other confusion of sound.

Opportunity was taken of the presence in Sydney of Sir Ewen Maclean, the retiring President of the British Medical Association, to invite him to perform the ceremony of laying the foundation stone of the building. A very successful and pleasing function for the purpose was held on Saturday, September 7, 1929.

Our tenancy of 30-34 Elizabeth Street, which was built by the Branch for its own purposes and had been its home since March, 1911, was terminated by the City Council on June 30, 1929. Since that date our temporary premises have been in Savings Bank Building, 21, Elizabeth Street, where we secured a lease for twelve months of rooms 713 and 714. Some of the Branch meetings and other meetings have been held in the conference hall of the building, which was found to be conveniently situated for the purpose.

The issue of debentures (Series "B") of £50 each authorized last year for the purpose of assisting the financing of the new building has been taken up to the amount of £20,550. A further issue of one thousand debentures (Series "C") of £10 each was subsequently made, carrying interest at the rate of £6 per centum per annum, and this has been taken up to the amount of £1,840.

Contract Attendance, Friendly Society Lodges.

The Medical Politics Committee met the Friendly Societies Association to consider a proposal of the latter body to amend Clause 15, Common Form of Agreement between Medical Officer and Friendly Society Lodge. The object of the proposed amendment was to ensure that the arrangement must be made at the beginning of the treatment.

It was agreed that it would be sufficient if the medical officers of the lodges were advised to this effect, viz., that the payment in Clause 15 should be an inclusive payment including all after attendance and the arrangement must be made, where practicable, at the first attendance.

In reply to a proposal that Clause 5, C.F.A., be amended so as to ensure that medical officers of lodges were supplied in the first week of January in each year with a complete list of members with their addresses, all alterations being supplied quarterly with addresses, the Friendly Societies Association advised that the furnishing of the whole of the addresses of members on the list of medical officers would entail unnecessary hardship upon lodge secretaries, but that no objection would be raised to supplying any particular address.

Workers' Compensation Act, 1926-1929.

The *Workers' Compensation Act, 1926-1927*, was amended in November, 1929, the section (S. 10) relating to medical benefit being rescinded and a new section substituted. A memorandum to members was issued setting out the Sections of the amended Act of most concern to medical attendants of injured workers.

A large number of requests for advice have been received from members as well as from Insurers in regard to the attendance on injured workers. Although the members concerned are satisfied on the whole with the arrangement with the Licensed Insurers of October 4, 1927, still it is

BRITISH MEDICAL ASSOCIATION—NEW SOUTH WALES BRANCH.

Receipts and Expenditure for the Year Ended December 31, 1929.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
January 1, 1929—			Debit Balance as per Cash Book	134	7 0
Loan, Premises Account	5,000	0 0	British Medical Association	2,093	14 0
Balance, Petty Cash		8 4	THE MEDICAL JOURNAL OF AUSTRALIA	2,058	10 0
Parent Association		3 1 6	Clerical Aid	2,396	4 0
Subscriptions	7,997	14 0	Rent (net, 13 months)	832	15 10
Interest	244	7 3	Printing and Stationery	213	1 4
Sales, Lodge Agreement Forms	19	11 5	Library	271	3 0
Balance as per Cash Book	23	19 11	Federal Committee	163	16 0
			Stamps, Postage and Duty	182	15 11
			Telephone	42	18 1
			Typewriter	35	11 0
			Cleaning Offices	75	0 0
			Beard Watson and Company Removal	63	18 4
			Travelling Expenses re British Medical Association Lectures	39	6 0
			Family Endowment Fund	26	3 3
			Electricity Account	27	2 9
			Exchange, net	17	8 4
			Sundries	104	12 10
			Loan, Premises Account	4,500	0 0
			Balance Petty Cash Accounts	8	14 9
	£13,297	2 5		£13,297	2 5

Examined and found correct.

A. MAITLAND GLEDDEN }
T. STORIE DIXON } Auditors.

March 6, 1930.

W. H. CRAGO,
Honorary Treasurer.

thought that Schedule "D" should be amended in certain respects and to that end a meeting of delegates of the Local Associations of Members with the Council has been arranged for April 24, 1930.

Hospitals Act, 1929.

The *Public Hospitals Act*, 1929, came into force in November, 1929, but so far no regulations have been issued.

The Chairman of the Hospitals Commission, Mr. R. J. Love, was kind enough to receive the president and other members of the council who paid him a visit of courtesy after he entered on his office. He was pleased to discuss the subject of public hospital administration and to explain his views in regard to the classification of hospitals, the development of community hospitals and other matters of policy.

Requests for advice have been received from members in connection with proposed district hospitals.

Procedure in Ethical Matters.

The model rules governing procedure in ethical matters of a branch in Australia, adopted by the Federal Committee, April 4, 1928, on the suggestion of the Central Ethical Committee of the Council of the British Medical Association (the re-drafting of which for inclusion in the By-laws of the branch was interrupted in order that, by the wish of the Central Ethical Committee, the Model Rules might be further considered) are still, it is understood, with the Central Ethical Committee. No further action therefore in the matter has been taken.

By-Laws—Advertisement in Newspapers.

Attention was drawn to the existence in the regulations of provision for public announcement of resumption of practice being made in newspapers as an exception to the rule of the profession under which a registered medical practitioner does not advertise "for the purpose of obtaining patients or promoting his own professional advantage." The Council directed that steps be taken for the amendment of the By-law by the omission of the provision.

Crippled Children.

As the outcome of a beneficent scheme devised by the Community Service Committee of the Rotary Club in Sydney for the Education and Vocational Training of Crippled Children in Sydney, which necessitated a survey of the crippled children in the metropolis, a clinic was established at the Sydney Hospital at which the children presented themselves for examination with a view to the suitability of each for education and training being determined. The Rotary Club invited the cooperation of the Association in its work; and the members of the Section for the Study of Orthopaedics were appointed by the Council to be a Committee, which included also the President, the President-Elect, the Honorary Treasurer and the Honorary Secretary as *ex officio* members, to consider and deal with matters arising in connection with the Rotary Club Scheme for Crippled Children Service. The Committee provided the staff necessary for the examination and classification of the children, and this part of the work was successfully accomplished. In due course the Rotary Club passed on the work to a local branch of the International Society for Crippled Children; and the Orthopaedics Committee of the Council has continued to act in cooperation with this body for the amelioration of the physical condition of the children found to be amenable to treatment.

Australasian Pharmaceutical Formulary.

An invitation was received from the Pharmaceutical Society of New South Wales to suggest amendments or alterations of the Australasian Pharmaceutical Formulary, with a view to a new edition being issued, the current publication being a reprint of the third edition, 1921. An advisory committee was accordingly nominated consisting of Dr. A. E. Mills, Dr. C. E. Corlette, Dr. John MacPherson, Dr. F. Guy Griffiths and Dr. A. W. Holmes & Court. Suggestions as requested have been made and

forwarded to the Revision Committee of the Pharmaceutical Society. Advice on certain particular matters has also been sought by the Revision Committee.

Visitors.

Reference has been made to the visit of Sir Ewen Maclean and the interest taken by him in the affairs of the Branch.

Opportunity was taken of the fact that Sir Charles Ballance, K.C.M.G., C.B., M.V.O., F.R.C.S., Consulting Surgeon to St. Thomas's Hospital, London, was on a visit to Sydney to invite him to address the members. He chose as his subject "Some Operations on the Brain," and his lecture, which was illustrated with lantern slides, was given on November 7, 1929.

Professor N. Allison, M.D., F.A.C.S., the Professor of Orthopaedic Surgery, Harvard Medical School, and Chief of Orthopaedic Service, Massachusetts General Hospital, who was passing through Sydney, kindly delivered a lecture to members on January 22, 1930, on "The Importance of Accurate Diagnosis in Joint Diseases."

Jubilee.

The present year, 1930, being the fiftieth anniversary of the New South Wales Branch of the British Medical Association, which was formed and recognized by the British Medical Association in the year 1880, it has been decided to celebrate the event in a suitable way at a time to be fixed, probably about the end of September. It is proposed that the Official Opening of the new British Medical Association House, 135-137, Macquarie Street, shall take place at the same time.

F. BROWN CRAIG,
President.

RETIRING REMARKS OF THE PRESIDENT.

Dr. F. BROWN CRAIG gave a short address (see page 439).

THE DEATH OF DR. H. W. ARMIT.

Dr. F. BROWN CRAIG moved:

That this meeting of members of the New South Wales Branch of the British Medical Association expresses its deep regret at the death of one of its prominent members in the person of Dr. Henry William Armit and requests the Honorary Secretary to convey its deep sympathy to his widow and daughter.

The motion was seconded by Dr. MERVYN ARCHDALL and carried in the usual manner.

FINANCIAL STATEMENTS.

Dr. W. H. CRAIGO, the Honorary Treasurer, moved that the statement of receipts and expenditure be received. The motion was seconded by Dr. A. J. GIBSON and carried. Dr. Crago also dealt with the balance sheet and financial statement of the Premises Account. He moved that they be received. The motion was seconded by Dr. A. J. GIBSON and carried.

On the motion of Dr. W. H. CRAIGO, seconded by Dr. J. A. DICK, the thanks of the meeting were conveyed to Dr. A. M. GLEDDEEN and Dr. T. STORIE DIXON for their services as auditors.

ELECTION OF OFFICE-BEARERS.

Dr. F. BROWN CRAIG announced the result of the election of the President-Elect and members of the Council as follows:

President: Dr. E. M. HUMPHREY.

President-Elect: Dr. GEORGE BELL.

Members of the Council: Dr. J. E. V. BARLING, Dr. C. B. BLACKBURN, Dr. A. J. COLLINS, Dr. W. H. CRAIGO, Dr. ANDREW DAVIDSON, Dr. A. M. DAVIDSON, Dr. J. ADAM DICK, Dr. L. W. DUNLOP, Dr. A. J. GIBSON, Dr. J. W. HOETS, Dr. C. H. E. LAWES, Dr. T. W. LIPSCOMB, Dr. R. J. MILLARD, Dr. A. A. PALMER, Dr. KENNETH SMITH, Dr. R. H. TODD, Dr. R. B. WADE.

A vote of thanks was accorded to Dr. A. M. Gledden, Dr. H. S. Marsh, Dr. C. G. McDonald, Dr. M. J. Plomley, Dr. J. Colvin Storey, Dr. W. Vickers, Dr. G. C. Willcocks and Dr. J. G. Hunter for their services as scrutineers.

On the motion of Dr. W. H. CRAIG, seconded by Dr. T. W. LIPSCOMB, Dr. F. W. Hall and Dr. A. M. Gledden were elected Honorary Auditors for the ensuing year.

On the motion of Dr. C. H. E. LAWES, seconded by Dr. J. W. HOETS, Dr. R. J. Millard was appointed representative of the Branch in the Representative Body, 1930-1931.

On the motion of Dr. KENNETH SMITH, seconded by Dr. A. M. DAVIDSON, Dr. K. S. Macarthur Brown and Dr. R. B. Wade were appointed delegates of the Branch to attend the annual meeting of the British Medical Association at Winnipeg.

INCOMING PRESIDENT'S ADDRESS.

Dr. E. M. HUMPHREY read his President's address (see page 438). A vote of thanks was passed to Dr. Humphrey on the motion of Dr. F. BROWN CRAIG, seconded by Dr. A. A. PALMER.

INDUCTION OF PRESIDENT.

In vacating the chair in favour of Dr. E. M. Humphrey, Dr. F. BROWN CRAIG said that they all knew Dr. Humphrey and knew that he would occupy the chair in accordance with the best traditions of the Branch.

Dr. E. M. Humphrey then occupied the chair and the meeting closed.

Obituary.

HENRY WILLIAM ARMIT.

OPPORTUNITIES for service come to all men. To some the opportunities are relatively few and the sphere of activity is restricted. To others the gate is always open with tracks leading outwards in all directions into the distance. Medical practitioners are numbered among the latter and of their number the journalist stands in the gateway with hand outstretched, pointing the way, while with encouragement and warning he acts as servitor to his fellows. If he is conscientious, he feels his responsibility, he dare not tire, he must keep his face as it were turned always to the east that with each new sunrise he may be the first to rouse his companions. Such was Henry William Armit, whose illness of four short days and whose tragic death have shocked the medical profession of Australia and cast a gloom over his fellow workers with whom he was in daily contact.

Henry William Armit was born in London on July 9, 1870. He was the son of William Armit, Secretary of the Hudson's Bay Company. He received his primary education at a small school at Kensington, London, and then went to Cheltenham College. After leaving Cheltenham he went to Germany where he studied physics and chemistry at Bonn University under Professor Glessler. Here he undoubtedly first acquired the attitude of mind which was to colour his life. He learned the value of minute observation, the importance of attention to detail and the need for critical examination of a definite statement. The fact that he undertook special study of these two basal sciences before he began the study of medicine, taught him their value, so that in his later years he judged every piece of research work from the point of view of pure science. Armit returned to England in 1887 and entered on his medical studies at Saint Bartholomew's Hospital. He graduated in due course as member of the Royal College of Surgeons of England and Licentiate of the Royal College of Physicians. He was offered the post of resident medical officer at Saint Bartholomew's Hospital, but in those days there was no salary attached to the position and he was compelled to go elsewhere. After a short sojourn at a hospital in the north of England he returned to London and entered the service of the Metropolitan Asylums Board as Assistant Medical Officer of the

Eastern Hospital. Here he gained considerable experience in epidemiological as well as in clinical work and incidentally contracted scarlet fever. From the accounts which Armit used to give of the work at this institution, it seemed to be part of the routine of every medical officer who joined the staff that he should suffer from scarlet fever. In those days nursing had not reached the high standard that it has attained at the present time, and the general education of nurses left much to be desired. It was characteristic of Armit that he should approach his medical superintendent with the suggestion that he be allowed to give clinical lectures to the members of the nursing staff. Permission was given and the innovation was successful from the start.

After leaving the Eastern Hospital he married Josephine, daughter of the late Dr. Pohl, of Godesberg-am-Rhein, and he took his bride to Torquay where he entered into general practice. At Torquay he sought to establish a sanatorium for the treatment of tuberculosis; he was one of the first, if not the first, to advocate the establishment in England of institutions of this kind. He took an important part in the establishment of a sanatorium in Devonshire. After leaving Torquay, he travelled for a time in Germany and returned to England. He undertook work as a *locum tenens* for a while and finally settled at Wembley in 1900. This marks the turning point in his life, for it was at this time that he started to undertake research at the Lister Institute and to work on the outdoor staff of *The British Medical Journal*. Up to this period he had been laying the foundation. In his writings he always insisted that an apprenticeship of general practice should be served by every man seeking to undertake work of a specialized character. He wrote from his own experience. Although his experience of medical practice had been gained in England, he was able later on to adopt the Australian standpoint and to appreciate as well as any Australian the conditions pertaining to general medical practice in the bush. Moreover, he was always eager to learn. Only a week or two before his final illness he was planning a trip to northern Queensland by aeroplane in order to investigate for himself the conditions under which the "flying doctor" has to work. He did nothing by halves. In 1905 he finally relinquished general practice.

At the Lister Institute Armit worked under Dr. (now Sir Charles) Martin. He always spoke of Martin in terms of admiration and he had the extraordinary faculty of being able to give chapter and verse for almost all the work which was undertaken at the Institute during his time. In 1901 he investigated with Dr. P. Horton-Smith Hartley the subject of the agglutination of the tubercle bacillus. Later he studied the nature of the dimethyl (p) amido-benzaldehyde reaction. At the same time he had been following the work of Ehrlich and others on immunity. He knew Ehrlich, having met him on several occasions in Germany. He published in 1902 a summary of knowledge of immunity at that time in a long article which extended over four numbers of *The British Medical Journal*. In 1902 at the instance of Dr. Ludwig Mond, he investigated some cases of poisoning that had occurred at Cyldach in Wales. The poisoning had been caused by the volatile compounds of the iron-nickel group of metals. The results of this inquiry were published in *The Journal of Hygiene* of July, 1907, November, 1908, and September, 1909, and in the *Proceedings of the Royal Society*, B Volume LXXVII. In the last-named communication he had associated with him Dr. A. Harden. In 1909 he again took up the study of immunity and paid particular attention to anaphylaxis. The first part of this work was published in the *Zeitschrift für Immunitätsforschung* in 1910. This work was interrupted by the part he took in the International Hygiene Exhibition at Dresden. In 1913 he collaborated with Dr. E. C. Hort in investigating the significance of fever and other problems associated with immunity and he was still engaged on this work when he was appointed Editor of *THE MEDICAL JOURNAL OF AUSTRALIA*.

Armit's connexion with journalism dated from the year 1901 when he joined the outdoor staff of *The British Medical Journal*. At this time Dawson Williams was

editor and Louis Taylor assistant editor. The first work entrusted to him was the abstracting of articles from German medical journals. As he became proficient in this branch, he was asked from time to time to write certain editorial articles and as time went on his contributions of this kind were more numerous. Armit always retained the greatest respect for the principles taught to him by Dawson Williams and quoted him as an authority on journalistic procedure and the art of writing. Of Louis Taylor's capacity for work he often spoke. His own ability to stick to a journalistic job, his power of "digging out" information from the most unexpected quarters and his determination to get to the root of a matter must have been due in some measure to the influence of these two men. His research work in the laboratory was not without effect on his journalism; it could not be otherwise. Accuracy was almost a fetish with him. On one occasion in recent years when he was chaffed and accused of being a pedant, he made the characteristic reply: "If by pedantry you mean meticulous accuracy, I must plead guilty." In 1901 he reported the German Congresses of Medicine and of Surgery in Berlin and in the following year he reported the German Congress of Surgery. These reports were published in *The British Medical Journal*. In 1905 he reported for *The British Medical Journal* the International Tuberculosis Congress in Paris and in 1906 he reported the International Congress of Medicine at Lisbon. At many of these international congresses he was official representative to *The Times*, London, an appointment of which any journalist would be justly proud. In 1906 he represented the British Association of the Medical Press at its triennial conference; his fellow representative at this gathering was Mr. Adolphe Smith. In the same year he made an investigation of the Poor Law administration and State Sickness Insurance in Germany. His report was published in *The British Medical Journal* in 1908. This report contains a great deal of valuable information and would well repay perusal at the present time, for many of the problems now being met with in British communities, had been faced by the Germans and for some of them solutions had been found. In the light of his Australian experience Armit on more than one occasion expressed doubt as to whether British communities would accept such arrangements as had been in vogue for some years in Germany. In 1907 Armit reported the International Congress of Hygiene and Demography in Berlin and Hamburg and following this the *Versammlung Deutscher Naturforscher und Aerzte* in Cologne. The former report was published in *The British Medical Journal* in 1907 and the latter in 1908. In 1909 he attended the International Congress of Medicine in Budapest; here he represented *The British Medical Journal*, *The Times* and the British Association of the Medical Press. In 1913 he reported the Bacteriological Section of the International Congress of Medicine in London for *The British Medical Journal* and the *Zeitschrift für Immunitätsforschung*. In 1908 he was appointed London correspondent to the *Berliner Klinische Wochenschrift*; as far as is known this was the first occasion on which an Englishman was appointed to the post of correspondent to one of the leading German medical journals.

During the course of his journalistic career he translated into English three German works: Forel's "Hypnotism," Ehrlich and Lazarus's "Anæmia" and von Schrotter's "Hygiene of the Lungs." The translating of a book into another language is not an easy matter. It is one thing to give a literal translation of the words; it is quite another to read the mind of the author and to express his thoughts in the idiom of the second language and there are always some words for which a good meaning cannot be found. Those who read Armit's translations of these works will agree that the translation has been written in excellent English. In his work of translation he had the invaluable assistance of his wife.

In 1910 he acted as Secretary of the Museum Committee of the British Medical Association and organized the medical museum in connexion with the annual meeting held in London. The compiling and editing of the catalogue fell entirely on his shoulders. This was an excellent preparation for the work which fell to his lot in the following year, when he was appointed Secretary to the

British Committee of the International Hygiene Exhibition. This exhibition was held in Dresden. The British Government of the day declined to render any assistance in equipping a British section. Armit was determined that a section should be formed. He carried out the combined duties of secretary, organizer, general manager, financial manager and director. He collected sufficient funds and material. His section was eminently successful; it was regarded as a scientific contribution and one of the most valuable, if not the most valuable, of the national sections at the exhibition. During the whole of the five months' life of the exhibition he gave daily lectures in the German language to mixed audiences on British hygiene. He was also requested by the administration on more than one occasion to demonstrate the sections of other countries to English-speaking visitors. At the conclusion of the exhibition each of the official representatives of the several countries received a decoration. The British section had not been set up by the British Government; it had been provided by private subscription. Armit thus could not receive a decoration. In its place the Saxon Government presented to him a most handsome and valuable piece of Dresden china—a representation of two galloping horses drawing a chariot with the driver standing erect. He was naturally very proud of this gift and valued it much more than he would have valued a decoration. This was not the end of his work in connexion with museum organization. In 1913 he was asked to act as secretary to the Museum Committee in connexion with the International Congress of Medicine. The whole work of organization, arrangement and management was left in his hands. The catalogue which Armit compiled single handed, is an indication of the amount of energy which he expended. It is a large volume of over 500 pages and a full description of the exhibits is given in English, German and French.

In addition to the journalistic contributions already mentioned, it should be recorded that Armit contributed articles to *The Lancet*, *The Times*, *The Manchester Guardian*, *The Westminster Gazette* and to several Continental journals.

During the years of his association with *The British Medical Journal* Armit took an active interest in the British Medical Association. He served on many committees and subcommittees. He was chairman of the committee of his Division in 1908 and 1909. He was a member of the medico-political, ethical, special finance inquiry, journal and other committees of the Association. He also acted as representative of his Division in the Representative Body of the Association for five years, 1905 to 1909. This gave him an insight into the workings and the constitution of the Association which was invaluable to him in his work as Editor of *THE MEDICAL JOURNAL OF AUSTRALIA*. It enabled him to give sound advice on medico-political matters when it was sought. It was his boast that Dr. R. H. Todd and he knew more about the constitution of the British Medical Association than any one else in Australia.

It will be seen from the foregoing account that Armit was peculiarly well equipped in 1914 to act as Editor of the new journal, *THE MEDICAL JOURNAL OF AUSTRALIA*. From this time onwards his history is the history of the journal; one cannot be considered apart from the other, for he was responsible for the journal from the outset, he set the standard by which it was worked, he extended its sphere of usefulness and it was almost the only consideration in his life after he came to Australia.

At the third session of the Intercolonial Medical Congress, held at Sydney in 1892, the question of the foundation of an Australasian medical journal was raised and a resolution was adopted affirming the desirability of such a step. Four years later, at the fourth session of the Intercolonial Medical Congress at Dunedin, Dr. (now Sir) Louis Barnett brought the question forward again. At that time there were three journals in existence, the *Australasian Medical Gazette*, published in New South Wales, the *Intercolonial Medical Journal*, published in Victoria, and the *New Zealand Medical Journal*. There was a considerable amount of opposition on account of vested interests and other reasons. Several proposals were brought forward in an attempt to get over the

difficulties and amongst them was the suggestion that an Australian Medical Association should be formed. The staunch supporters of the British Medical Association would not hear of this and the establishment of one journal was again postponed. There was no machinery for the coordination of the activities of the six Australian Branches of the British Medical Association. The leaders in the six Councils determined to overcome the difficulties and in the end the Federal Committee was formed with the approval of the Council of the British Medical Association. In May, 1911, the newly-formed Federal Committee sent to the Branches for consideration and approval the following two resolutions:

1. That in the opinion of this committee the Branches of the British Medical Association in Australia should jointly own and conduct one weekly paper.

2. That in the opinion of this committee machinery should be provided for the Branches to combine to purchase the interests of New South Wales and Victoria in the *Australasian Medical Gazette* and the *Australian Medical Journal* respectively to conduct a weekly paper.

As a result of this step The Australasian Medical Publishing Company, Limited, came into being and arrangements were made whereby the Company could acquire the two journals, above mentioned, from the New South Wales and Victorian Branches. The Company was registered in New South Wales in 1913. Those who drafted the memorandum of association of the Company were far-sighted and made the objects comprehensive. One of these was to conduct, establish, print, publish and circulate newspapers, journals, magazines and other publications, literary works and undertakings and in particular a journal to be the official journal or organ of the respective Branches of the British Medical Association in Australia and New Zealand represented in the Company. The original Directors of the Company were: Dr. W. H. Crago (Chairman), Dr. W. Kent Hughes, Dr. W. N. Robertson, Dr. F. S. Hone, the Honourable A. Saw and Dr. Gregory Sprott.

Thus THE MEDICAL JOURNAL OF AUSTRALIA came into being. The next step was to find an editor. Applications were invited and Henry William Armit was appointed. The appointment from the start was considered to be a wise one. The *British Medical Journal* wished him success in the following words:

Dr. Armit is known as a scientific investigator, and has taken a prominent part in the work of the British Medical Association. He was for several years a member of the Representative Body and has served on several committees. He has long been a valued contributor to the Journal, and he takes with him to his new sphere of labour our warmest wishes for his success.

Armit sailed from England with his wife and daughter on April 20, 1914, and arrived in Sydney full of hope and vigour on June 4. The first issue of the journal appeared on July 4, 1914. This was an achievement of which he could be proud. He came into a new country and found what he used to describe as a dearth of material. He had to organize his office and adapt himself to the point of view of the Australian practitioner. Perusal of the earlier numbers of the journal will show how quickly he did this. It was not a pose on paper, he lived so completely in his work that the Australian outlook became part of his nature. He wished to see progress made in Australian medicine and particularly in Australian research, so that Australia would be able to hold up her head with honour among the scientific investigators of the world.

The progress of the journal under Armit's care may be divided into three periods. The initial period was not destined to be one of untroubled calm. Exactly one month after the appearance of the first issue war was declared. Armit offered his services to the authorities, but was told that he could do more good by remaining at his post. His name was put on the reserve list where he held the rank of Captain. Whenever he took up his pen in the cause of King and country or in appeal for the sick and wounded, he wrote with conviction and

inspiration. During these days the worries were chiefly financial, the cost of paper and so of printing rose enormously and advertisement revenue was not easy to obtain. To allow curtailment of the activities of the journal was not to be considered for a moment as far as he was concerned. He saw a way out of the difficulties. If he could instal his own type-setting machine and composing room, he could reduce the cost and in addition he realized that he would then be in a position to give the attention to detail that he so earnestly sought. He prevailed upon the Directors to see the wisdom of the scheme and the journal entered upon the second stage of its existence. A linotype machine was installed in a room in the B.M.A. Building at 32, Elizabeth Street, Sydney, and in an adjoining room was placed the complete outfit of a modern composing room. By dint of application he soon obtained an intimate knowledge of the technicalities of printing. He insisted on the best type of work and those who served under him, produced it. He invariably worked so hard himself that his fellow workers, for he refused to regard them as subordinates, could do little else than follow his example. If the printing staff had to work overtime, he would not dream of going home, as he might have done; he stayed back with them. It was not that he did not trust them. He left them alone to work in their rooms, while he did some editorial work in his own office. Long years before this he had studied the question of industrial hygiene and he determined to have the best possible working conditions for his men. He did all he possibly could to insure freedom from trade hazards. He reaped his reward in the loyalty and affection of his staff. The second stage of the journal's career which was started in October, 1921, was highly successful. So successful was it that the cost of installing the plant was paid for out of income. Armit then recognized that the journal was being cramped and that no further increase in size could be undertaken unless new plant were obtained. He laid a proposal before the Directors of the Company in 1922 that the printing activities of the Company should be extended and that the Company should acquire its own complete plant. His optimism was so great and his arguments so sound that, in spite of a temporary reverse brought about by an adverse verdict in a libel suit, the expansion was authorized and the plant was ordered. During all these years he had been off duty for only a week or two. He refused to take rest when he might have done so. He tried to keep everything under his personal control. The inevitable result was that he began to feel the effects of the strain. The Directors knew that he would require all his energies for the new venture of equipping and starting a printing house, so they told him that he had to take three months off duty. Just about this time his assistant was employed as a full time officer. The way was clear and Armit sailed for England. He was in the Old Country for exactly eighteen days. The holiday, brief though it was, did him an immense amount of good and he returned with renewed vigour. He put his soul into the fitting out of the new building. He superintended the drawing of the plans and watched every stage of the building operations. He took photographs of it in all stages of its erection. It was as though he were putting every brick in place himself. He sent for the Secretary of the Printing Industry Employees' Union of Australia and discussed the plans with him, asking for suggestions which might make the working conditions of his staff more hygienic and more congenial. He searched the printing trade for his staff. He offered liberal remuneration to those whom he considered first class tradesmen and he chose a staff of which he could well be proud. The foundation stone of The Printing House had been laid on July 16, 1924, by Dr. W. N. Robertson, Chairman of Directors, and on March 21, 1925, the first issue of the journal, produced entirely at the new building, was published. This was the beginning of the third stage.

It is not necessary to describe the course of the journal in minute detail from this date. Larger issues were produced and appropriately enough the second volume for 1929, the last that he was destined to edit, was the largest during the life of the journal. From time to time more machinery became necessary and this was provided.

The Company was paying its way, but the fact that it was not possible to pay debenture interest, together with the trade depression, caused the Directors much concern. In September, 1929, they deemed it necessary to make certain changes and Armit was faced with the fact that some of his ideals could not, at any rate for the time being, be attained. He had set his whole aim at attaining them and he felt it tremendously. With typical determination he did his best to carry on. Again when it was suggested that he should rest, he refused to entertain the idea. In the end he made up his mind to discuss the question of leave with the Directors, but the opportunity did not come. His illness attacked him suddenly and, as has been already related in these pages, his death followed within four days.

Apart from his work as Editor of *THE MEDICAL JOURNAL OF AUSTRALIA* Armit found time to take an active interest in the affairs of the Australian Veterinary Association. He fathered the first issue of *The Journal of the Australian Veterinary Association* and took a keen interest in every succeeding number. He was made an honorary member of the Association. He was also a Vice-President of the New South Wales Branch of the League of Nations Union and a member of the New South Wales Institute of Journalists. He was Associate Editor for Australia of *The Journal of Industrial Hygiene*.

Henry William Armit was a man with a great heart; he was an idealist and an optimist. In his journalistic work he was controlled by his scientific mind, his ethical mind. His love of truth and his desire to search for it dominated his outlook. His ideals in this regard have been referred to in the issue of March 21. His sense of duty was acute. He always put the journal first. If he thought it necessary to condemn a certain proposal or a certain course of action, he did not ask: "Is this wise?" or "Will this react on me?" He would say in so many words: "It does not matter about Armit. It is the journal that counts." On principle he never defended himself from attack, unless the question involved was one of scientific accuracy in the pages of the journal. He cheerfully accepted all responsibility in connexion with the journal. If an assistant in the office made a mistake and the person affected complained, Armit would not dream of saying that he was not to blame. He was the head and he believed that, as he was entitled to any credit for what might be done, he should shoulder the blame. It was small wonder that "the Chief," as he was affectionately known, was respected by every person in the house. Moreover, he worked so hard himself and spared himself so little that each and every one of his staff could not but follow his example. It is appropriate that the picture of him, published herewith, should show him at work. This picture is enlarged from a snapshot taken by his daughter while he was working in his study at home. If one of his staff was in trouble, he was kindness and gentleness itself. There was nothing which he would refuse to do. If bereavement occurred, he would be a tower of strength. He could always say the right thing to anyone who required stimulating. If he thought it necessary to denounce a would-be contributor, he used no half measures, especially if, as occasionally occurred, an attempt were made to "put over" something which was obviously dishonest or untruthful. He was sometimes hasty in his judgements, but he could be made to see that he was wrong. He warmed to appreciation and was stimulated. Nothing pleased him more than when he received a letter from someone on the other side of the world whose work had received critical mention in the journal. He was generous, often to a fault, for he could not refuse an appeal for assistance, however unworthy. He was widely read and wonderfully well informed on matters non-medical. In his own home he was an ideal host and those who were privileged to know him in these surroundings, saw in him a devoted and unselfish husband. He was passionately fond of music and what is more he understood it. He composed a couple of songs, but only on the rarest occasions could he be prevailed upon to produce them. He distinguished sharply between the good and the mediocre in musical performances and voiced his opinion quite bluntly about

the latter. He was fond of pictures and, as might be expected, he loved books.

Such was Henry William Armit, the man. He was the first professional medical journalist that Australia has known, professional in the sense of giving his whole time to journalism. He has done more for Australian medicine than is realized. He has created a monument to himself in his journal, for it was his. This monument must be cherished by his fellows. The knowledge of what he achieved will of a surety be of some comfort to his widow and daughter in their great sorrow. The hand of sympathy goes out to them from the whole medical profession of Australia.

Dr. F. S. Hone writes:

I think I was the first to welcome Dr. Armit to Australia when he arrived at the Semaphore anchorage in 1914; and only ten days before his death I spent a delightful evening with him at his home. In the sixteen intervening years I had been closely associated with him, at first officially as one of the Directors of the newly formed Australasian Medical Publishing Company, and later in the ties of a valued friendship. I find it hard to realize he is gone; I look back with wonder on what he accomplished. Today few of us realize that, when he landed, the idea of one medical journal for Australia was a new one. The Federal Committee, with the approval of the Branches, had launched the venture with faith and hope, tinged with disquietude. We did not know each other then as we do now, we had not been welded together as a profession by the war; only one or two of the Directors had any journalistic experience; we realized how much depended on the type of man we secured as our first editor.

Only those of us who were intimately associated with Dr. Armit's work in those early years of the journal know the full extent of the debt which the medical profession of Australia owes him. The first number of the journal appeared on July 4, 1914; war broke out on August 4. All the previous estimates of the Directors regarding revenue from advertisements, cost of printing and paper, help from contributors and so on, at once went by the board. An organization had to be built up out of nothing and the journal financed and maintained in face of unforeseen and unprecedented difficulties, not merely for the five years of war, but in the difficult period immediately afterwards.

It was fortunate for us as a profession that we had the journal as our mouthpiece. But I think that even his local committee would agree that it was almost entirely due to Dr. Armit's ability, unflinching courage and optimism and his unsparing devotion to the task to which he had been called, that the journal not only never missed an issue, but yearly increased in merit and in influence. No hours were too long for him to work, no difficulties too great for him to conquer, no task too small or menial for him to undertake. No one but a strong man, thoroughly trained in all departments of his calling and with a passion for the good name of the journal and the profession, could have succeeded. The very insistence on perfection in detail, which in later years made it so hard for him to hand over responsibility to others, was in those days an asset.

From the beginning he set before himself the highest standard of scientific accuracy and literary excellence for the journal—too high a scientific standard many thought in the beginning—and he refused to lower this standard, however assailed. He was astonishingly well read, not only in all branches of his profession, but outside it; had a retentive memory and wide experience to back any opinions he put forth. He never faltered in his ambition to build up an Australian journal equal to the leading medical journals in England and America and he was never so proud as when he learned from time to time that the journal was receiving recognition overseas. He was always a fighter for what he considered to be in the best interests of the profession, but always a clean fighter. Even his errors in judgement and the difficulties in which he landed the journal from time to time may be traced to this zeal for the good name of the profession.

Outside the actual columns of the journal he aimed at making the editorial room the meeting house for men with ideas and the centre from which reforms and new

movements for the good of the profession emanated. His insistence on reforms in medical education and on the cooperation of the whole of the medical profession in the prevention of disease are well known. Even when we thought that he took himself too seriously in this respect and that some reforms did originate outside his sanctum, we recognized that this was all part of his single-mindedness and earnestness.

It was the same with the establishment of The Printing House—his creation, the product of the union of his intellect and heart, nourished with his life blood. If the journal was his first born, it almost seemed as if The Printing House was nearest his heart in these later days; it was to be the same influence in the printing world as the journal in the medical world—the last word in machinery, the last word in industrial hygiene. His passion for the fulfilment of these ideals at any price made it hard for him to check his flight when adverse winds blew and there is no doubt that his last days were shadowed by those economies and alterations in organization which we felt bound to introduce, to which he could never quite reconcile himself. But even if the fulfilment of his dreams is delayed, there is no doubt that he built on firm foundations.

To those of us who were privileged to be admitted to the intimacy of his private life, he was ever the loyalest of friends, brimming over with kindness and absurdly grateful for anything done for him. In his own home he was a devoted husband and father, a courteous and lovable host, with a simplicity that disarmed criticism. That dogmatism and impatience of opposing views that sometimes distressed him in public life, fell away and one came across an unexpected humility, a queer sense of imperfection, a dissatisfaction with himself and the value of his work that revealed that however sternly he might criticize others, he was his own sternest critic. If only he had revealed this side more to the outside world, much misunderstanding might have been saved. But the journal and The Printing House were so much part of himself that criticism of them in any detail seemed to him to be criticism of himself. And while he blossomed out in a friendly atmosphere, in a critical atmosphere his petals curled up and to a hostile critic nothing was visible but the forbidding outside of the calyx which held the bloom within. He himself suffered more from this than did his critics and towards the end he became a lonely soul. When I spent my last evening with him, he was jaded and dispirited, felt and complained that he was growing old, was worried about his personal future and at that point of strain when every proposal to meet difficulties seemed to be a personal attack. This was largely the result of continuous overwork, for contrary to all advice he would never take a holiday and even when his Directors insisted on him going away, he would simply take a sea trip, which he always loved, and would be at work on the boat. I have travelled with him on an interstate express and heard his portable typewriter going long after the rest of us had ceased arguing and again in the morning before we began.

We knew his faults. They were those of a sincere lofty nature, with high enthusiasms and without guile, "who never turned his back; but marched breast forward; never doubted clouds would break; held, we fall to rise, are baffled to fight better." And we are all in his debt, for he was one of the most powerful factors in helping to raise the scientific and ethical standards of our profession. The Printing House is his monument, THE MEDICAL JOURNAL OF AUSTRALIA from 1914 to 1929 is his memorial volume.

Dr. W. N. Robertson writes:

The news of Dr. Armit's sudden demise comes to me with a sense of great personal loss. Having been associated with him since his arrival in Australia, first as a Director of the Publishing Company and latterly as Chairman of Directors, I was brought into very intimate association with him in the development and management of the affairs of the journal. One could not see much of him or his work without being struck with his intense enthusiasm for the building up of the journal. It became his dream and the monument to his life work. He never spared himself and I do not doubt that his intense devotion and

the long and exhausting hours he worked so reduced his vitality that he had no resistance left when he was overwhelmed by the intense infection of his fatal illness.

Many times one has had to differ from him in his ambitions for the development of the journal, but also many times it hurt to do so, as his enthusiasm was so genuine and his intentions so honest, that it was hard to question his judgement. Often one has been cross with him. He had the faults of his qualities, but withal he was a lovable chap. He had vision, ideals and enthusiasm which all appealed to one. The profession in Australia owes much to him. He was striving for more scientific work, for everything that would raise the standard all round. Research was near to his heart. He had been a laboratory man for a good part of his time and visualized the advantage of that side of professional work. Possibly he overstressed that, but he gave of what he knew and believed. One would have wished him to live longer to see his journal soundly established financially as well as scientifically. He was an idealist with a clean heart. We shall miss him much.

To his wife and daughter we can only offer the consolation that to him may be given the benediction: "Well done! good and faithful servant." May an all wise Providence shelter them in the hollow of His hand.

Dr. T. W. Lipscomb writes:

Vale, Henry William Armit, first Editor of THE MEDICAL JOURNAL OF AUSTRALIA and first Manager of The Printing House. As Sydney Director of The Australasian Medical Publishing Company, Limited, and Chairman of Directors, I realized the enormous amount of work Dr. Armit had done and was doing for the Medical Journal and Printing House and thus for the benefit of the profession. He seemed to thrive on work and was never happier than when stimulating and advising one who was doing some special scientific or research work. He was a great stickler for pure English and pure grammar, both written and spoken, and an enemy of slipshod abbreviations and terms into which one can so easily lapse. In this connexion many looked upon him as pedantic, but we ought to congratulate ourselves that the journal has always stood for correctness in speech, terms, grammar and scientific references. For this Armit, and he alone, is responsible.

He was a man to whom practice was not congenial, but turned towards the scientific and journalistic side of medicine; his object was to make The Printing House the scientific printing house of Australia and so well did he lay its foundations that he could boast with pride that The Printing House could do and is doing scientific publication that is equal to the best of any of the old-established overseas houses and that other houses in Australia cannot touch.

The men that he has trained, were ever loyal to him and very soon became imbued with his slogan that no work but the best must go out of the house. That same spirit will still go on and in that way Armit will still live.

Sir Henry Newland writes:

The passing of Dr. Armit, were such an incentive needed, must inevitably bring realization to the minds of many of the commanding position he occupied in medical journalism in Australia. No man could have assumed the duties of his office under less favourable circumstances, as war was declared soon after his arrival in Australia in 1914. Nothing daunted, he threw himself with characteristic energy into the duties of editorship of the recently founded MEDICAL JOURNAL OF AUSTRALIA, with the result that the merits of that journal were recognized not only in the Commonwealth, but beyond the shores of Australia. Fastidious to a degree, not only in regard to the literary features of medical journalism, but also in regard to the technical aspects, some four years ago he urged on those responsible, the foundation of a printing house. Conceived and completed on a scale perhaps beyond present needs, The Printing House in Seamer Street will nevertheless always be evidence of the foresight of a pioneer medical journalist. "*Si monumentum desideras, circumspice.*" Dr. Armit's great capacity for work was always a source of wonder and admiration to those who knew him, and no medical journal was ever served with more

unwearying devotion than THE MEDICAL JOURNAL OF AUSTRALIA. Dr. Armit was a man of strong personality and a man cast in that mould, least of all if he be an editor, cannot be expected to please everybody. The fact remains that Dr. Armit brought distinction to THE MEDICAL JOURNAL OF AUSTRALIA and so to himself. The first editor of THE MEDICAL JOURNAL OF AUSTRALIA has won a place of honour in the medical annals of Australia and time will but add to its security.

Dr. Gifford Croll writes:

A great man has passed away and medical science, especially Australian medical science, is the poorer for his passing. Dr. H. W. Armit came to us in 1914 to found, manage and edit THE MEDICAL JOURNAL OF AUSTRALIA. That he liked to frame his own policy and that he often exceeded his instructions there can be no doubt, but what man with any greatness in his make-up has not exceeded his instructions. The journal was formed to be the official organ of the British Medical Association in Australia. Armit, whilst loyally accepting this function, had more ambitious views. He wished to make it a journal of world-wide renown—the organ to which men looked for all the valuable and original contributions to medical science produced in Australia and of these there are not a few. It was really this ambition which led him into The Printing House scheme. He hoped by this means to have sufficient money and sufficient space to publish all the extra scientific work as well as the proceedings of the Branches. He hoped also to be thus able to produce it in a manner worthy of the material. That he was impatient of delay, often indiscreet, intolerant and lacking in diplomacy is freely admitted, but of his self-sacrifice and singleness of purpose there can be no question whatever. To carry his plans to fruition he worked almost night and day for nigh on twenty years. They were years of labour, of strife and even of disaster, but he never faltered, nothing ever turned him aside from his goal till death crossed his path.

Now he is gone and the journal, as he visualized it, is still far from fulfilment. Whether we can achieve the objective that he planned, only the future can show, but his effort has not been in vain. In its first seventeen years the journal has acquired a character and a position which it would never have reached in the hands of an ordinary man. It will always remain a monument to its founder.

Dr. J. Newman Morris writes:

The news of the death of the late Dr. H. W. Armit was received in Melbourne with feelings of great regret. We had not known of his illness and had been looking forward to seeing him at the end of the month at the meeting of Directors of The Australasian Medical Publishing Company, Limited.

At the meeting of the Council of the Victorian Branch of the British Medical Association, held on the evening of Thursday, March 13, Dr. R. G. McPhee, the President of the Branch, moved the following resolution, which was seconded by the Senior Vice-President, Mr. Victor Hurley, and carried by the members in silence, all standing:

A letter of sympathy be sent to the relatives of the late Dr. H. W. Armit.

It was felt that the death of Henry William Armit had removed from our midst a striking personality and a man of high aims and ideals. It is true of medical literature as of literature in general, that it is a reflection of life and for many years past it has been Armit's duty to record for subsequent generations the medical activities of his period in this Commonwealth and he has performed this difficult duty in an efficient and correct manner. It was easy to appreciate that this objective was difficult and its successful accomplishment required the efforts of a well-trained, strong and fair-minded recorder and editor.

The amalgamation of the Australian medical journals in 1913 was not accomplished without some opposition, although the purpose of this fusion was the better development of medical journalism in Australia. Armit always said that he regarded himself as in no sense belonging to any one State, but that he was the journalistic representative of the medical profession in Australia. He was

always ready to publish work from all the States, so long as such work attained the high standard which he had set for the journal. He had been trained for editorship in the excellent atmosphere of *The Lancet* and *The British Medical Journal* and considered that no lower standard would do for Australian medicine. He desired that his journal should be the vehicle for conveying to medical scientists in other countries the results of the work done in Australia by research workers and the ambition he often gave expression to, was that THE MEDICAL JOURNAL OF AUSTRALIA should become one of the great medical journals of the world. Armit's ambition was to some extent realized in his lifetime and no articles of importance published by him escaped the notice of reviewers and indexers. He was jealous of the quality of the work presented for publication, but he never balked in his obligation to publish the proceedings of Branch scientific meetings, giving adequate space to each Branch of the British Medical Association in Australia. His code of ethics was of the strictest character in journalism and medicine. Strict observance was always paid in matters of literary ethics and in exercising his rights in editing articles submitted to him he insisted on a correct acknowledgment of references and quotations. How often has he appealed to us to maintain a high standard of medical ethics and his final editorial article is a reflex of the ethical outlook of the man.

We in Victoria have no adequate way in which to express the deep sense of loss which we feel in his death, which has removed from us a man who always exhibited the greatest amount of zeal in the development of his life's work. We share with our medical brethren throughout Australia the most profound sympathy for his widow and family.

Dr. J. H. B. Walch writes:

The following remarks were addressed by the President of the Tasmanian Branch to a meeting of the Branch Council held this day:

Since the date of our last meeting death has claimed one of our best known professional brethren and caused deep and widespread regret in the medical world. I refer to the death of the late Editor of THE MEDICAL JOURNAL OF AUSTRALIA, Dr. H. W. Armit.

Dr. Armit, as you know, was the Editor of THE MEDICAL JOURNAL OF AUSTRALIA for the past fifteen years and in that capacity rendered signal services to the profession. In our isolated position we did not see as much of him as we would have liked. Nevertheless, in matters medico-political or ethical he kept in touch with our Branch and was always willing to assist by giving his advice freely when asked or opportunity offered.

As Editor of the journal he proved himself not only a prolific writer, but to be possessed of sound knowledge and good judgement. He was ever anxious to uphold the traditions and dignity of the profession and many of us will remember with gratitude the support and help he gave us during the early days of the hospital dispute.

His early and somewhat sudden death is a distinct loss to the profession for whom he has worked so zealously.

As a Branch and as individual members I am sure we appreciate the great work he has done for the profession and while we mourn his loss, we shall ever cherish his memory.

The Branch Council then passed a vote of condolence for Mrs. Armit.

Dr. Keith Inglis writes:

The death of Dr. Henry William Armit has removed an outstanding figure from the medical profession in Australia. A man of culture and high ideals, he held strong views and was fearless in advocating a cause which he felt to be right. He worked unceasingly in his endeavours to maintain a high ethical standard in the profession and he set an excellent example of loyal service not only in the interests of the medical profession, but also of the community at large. To me his death means a serious personal loss because, in times of doubt, I often

approached him for advice on questions of policy or difficulties of a personal kind. He was ever ready and willing to help and his advice was so sound that it was usually acted upon.

Dr. S. F. McDonald writes:

To say that medicine in Australia has suffered a great loss through Dr. Armit's death is grievously to understate the tragedy. Since his editorship of *THE MEDICAL JOURNAL OF AUSTRALIA* began, he has had only one interest in life, the success of the journal from a scientific, literary and journalistic standpoint. To this he devoted his life, seven days a week and many hours a day, in spite of the remonstrance of friends and colleagues. This hard work, harder than that of the hardest worked of mortals, the general practitioner, he gave unstintingly, perfectly rewarded if his beloved journal was thereby brought nearer to his ideal. These ideals were high, too high sometimes for the mere daily bread and butter class of his readers who would have been more satisfied had their journal contained merely records of proceedings and meetings, personal touches, and not the often very technical and remote articles which sometimes appeared.

He was, however, ruthless in judging what was sent to him for insertion and often took liberties with contributed matter, excessively galling to the contributor. The Editor's judgements were always founded on what he believed to be scientific and literary standards and renounce them he would not.

A man of strong force of character and strong opinions, he naturally at times came into conflict with those who held different views from himself, but when convinced by what he considered adequate evidence, he would continue in his way unmoved. At the same time, too, he could, when convinced that he was in error, acknowledge his fault freely and ungrudgingly. Witness his leading article in the journal of March 8 last, on lead poisoning in Queensland. It is no secret that for years he had held very different views on the matter to those held in Queensland, but on this occasion he owned himself convinced and made an *amende honorable* which should have satisfied the most exacting.

He has left to the successor for whom the Publishing Company must now search, an example in medical journalism which none but an exceptional man may hope to equal.

Dr. A. B. Walkom, Secretary of the Linnean Society of New South Wales, writes:

By the death of Dr. H. W. Armit, societies publishing the results of scientific work in Australia have suffered a very great loss. Dr. Armit gave up the greater part of the last few years of his life in an attempt to establish on a sound basis a science press for Australia—a printing establishment capable of attaining the highest possible standard of accuracy and style in the printing of scientific publications. The enthusiasm and energy with which he attacked this object some six or seven years ago, will only be realized by a few of his colleagues; the determination with which he persisted in working at high pressure—usually for about sixteen hours a day—repeatedly gave them cause for admiration and amazement, tinged with anxiety, for he would take no heed of his colleagues' warnings of the inevitable result of such continuous strain. The success which attended his efforts must have given him great satisfaction, for I feel that it may be very truly claimed that he was well on the way to the complete achievement of his main object. The Printing House and the scientific publications issuing therefrom will serve as a monument—permanent, it is hoped—of a truly great man.

One could not be closely associated with him for long without conceiving a very high personal regard for him and his many friends will not easily recover from the personal loss they have sustained in his sudden death.

Mr. W. R. Hebblewhite writes:

In the death of Dr. H. W. Armit the Standards Association of Australia has lost an understanding publisher, an indefatigable Committee Chairman and an esteemed friend.

The printing of standard specifications presents two difficult problems. The extraordinary degree of careful

attention necessary for the avoidance of unstandardized practice in the use of type faces, symbolic representation of mathematic quantities and so forth and the scientific knowledge and trade technique, required for the representation of these quantities accurately in printed form, are qualities by no means easy to secure in a printing establishment. Dr. Armit's professional training and his infinite capacity for attention to such detail enabled him to render to the Association a service of inestimable value.

Moreover, he approached this task with so keen an enthusiasm that it was evident he regarded it as his personal responsibility that the publications should be above criticism. It was his eagerness to establish a sound and logical basis of practice in printing of scientific and technical works which led to his proposal that the Association should establish a standard for typography. As Chairman of the Committee subsequently appointed to undertake this work he displayed the same mastery of detail and enthusiastic and unflinching zeal which, with the willing and efficient support of the Committee Secretary and members, was mainly responsible for the excellent progress that has already been made.

From the point of view of one who, though outside the organization directed by Dr. Armit, was frequently a visitor to The Printing House and had discussions with members of the staff, the most impressive monument to the Doctor's organizing capacity was the exceptional spirit of loyalty and cooperation which pervaded the whole atmosphere of the house. The relations between the head and his staff appeared more paternal than autocratic. The effect of this happy relation upon the efficiency of the work was constantly exemplified in the quality of the service to clients. Not only was there an absence of irritating mistakes due to carelessness, but some very helpful and intelligent suggestions made from time to time by individual members of the staff were gladly adopted.

Of the man himself one can speak only in terms of the highest admiration and regard. Merely to hold converse with him was to be attracted by that old-time courtly dignity and personal charm which made a very real pleasure of the most prosaic business transaction. However native caution might whisper that business is business and therein no man is to be trusted, one felt that here was a man whose word could be trusted as implicitly as his written bond. A fine and courteous gentleman, yes, but greater than that, he was in very truth an honest man.

Mr. L. Hart writes on behalf of the printing staff of The Australasian Medical Publishing Company, Limited:

In the passing of our late chief, Dr. Henry William Armit, the staff of The Printing House has suffered a loss the extent of which cannot now be measured. It was our privilege to be in daily contact with him for some years and it is appropriate that we should record our deep appreciation of his great character and work. That his influence will remain with us and his teaching find full fruition in the years to come we have no doubt. Deeply imbued with the ethical and humanitarian spirit of the profession to which he belonged, Dr. Armit carried those principles into his commercial activities with a determination which spelt success. The task of building up The Australasian Medical Publishing Company to the high standard which he had set was a formidable one, but it was a task for which his wide knowledge of affairs, his absolute fairness, patience and fearlessness eminently fitted him. From the beginning he maintained the closest possible contact with his staff and from this intimacy arose his solicitude for their welfare and his dislike of strict commercialism. Frank and outspoken himself, he detested and despised anything savouring of equivocation or deceit in others; but to the one with a genuine complaint he was a patient and friendly counsellor. There are many amongst us who know how deep was his sympathy, how liberal his help when trouble came to his friends. Many asked his help and it can be truly said that none sought it in vain.

In his journalistic capacity Dr. Armit was an infallible guide to his staff. Added to his wide erudition was a remarkable knowledge of typography and the graphic arts, while his accomplishments as a linguist were of incalculable value to those who sought his aid. Quick to

reach the point of a question, his opinion when given was seldom wrong. His advice was at all times freely given, no matter how persistent the calls upon his own time: all his efforts seemed directed towards the comfort and advancement of his associates.

Dr. Henry William Armit has gone from us; we know no more the encouragement, the kindly consideration which did so much to smooth the ruggedness of our professional road. In life he was our guide, our inspiration, our friend. May we honour his memory by living up to those high ideals which he set and of which his own life was the supreme achievement.

A non-medical journalist writes:

Many of the younger journalists view with scepticism the ability of any but a newspaper trained man to conduct a journal. They adopt an air of condescension towards any who in their view come in "through the back door." However, journalistic ability cannot be measured in terms of cadetship. To me in 1924 came this awakening. Dr. Henry William Armit, Editor of THE MEDICAL JOURNAL OF AUSTRALIA, was a journalist and more, a writer. That the medical press of the British Empire did not haphazardly lay its hands upon a good writer on medical subjects and say: "Here, my son, is a medical journal, edit it," surprised me. Here was no backdoor entrance to journalism. Rather was there a harder course of training than any lay press demands.

I interviewed Dr. Armit in November, 1924, when he told me his attitude towards and opinions of the daily press. He was hard, but just. A man trained in medicine, skilled in research work, with years of journalistic experience and at that time over ten years in an editor's chair, was he to submit to the blue pencil of men who knew through lack of training little of what he wrote or controlled? Can one condemn him in describing as "garbled" some of the reports that appeared on medical matters. His abruptness, his refusal on occasion to say anything were misunderstood. He had an ideal—"Truth before news."

From that first meeting I came to know more of the man and his work. The wide experience he had in England of the inner workings of the British Medical Association, his close contact here with its Federal Executive combined with his innate code of honour set him foremost in the fight for the maintenance of the ethics of his profession. His leaders—models of style—were often engaged in matters of ethical conduct. No cause gave him greater joy nor added increased zest to his work than the fight for honour. With a directness, no doubt due to his early scientific training, he went to the heart of things. Unless he could see that a good purpose would be served, he would enter into no movement. It was typical of the man that he would not waste time with those who had not the power of refusal.

In his office he had time to see everybody. Often his day was filled with callers, but his work never suffered. He paid the price of an unfailing courtesy by working late into the night. His literary style was worthy of emulation, his meticulous attention to detail a model of editorial skill, his knowledge of typography more profound than his craftsmen. With these attributes he commanded admiration as an editor. His high ideals, unfailing courtesy, never tiring energy and readiness to help those in contact with him render his passing a deep regret to all. Journalism has lost a master.

Mr. W. A. Rainbow, Librarian, The Australian Museum, writes:

The passing of Henry William Armit, founder of The Printing House, is a severe loss to technical and scientific circles. Since his arrival in Australia some sixteen years ago he had laboured assiduously to build up a printing service which catered for scientific publishing to a degree not previously locally attained. This he achieved; he had his trials and tribulations, and he was successful. He had a fine knowledge of typography and printing practice which he was ever ready to place at one's assistance.

In the truest sense of the word one could describe him as a gentleman—one who would not knowingly hurt the feelings of another, one whose friendship was something to cherish.

Medical Appointments: Important Notice.

MEDICAL practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

BRANCH.	APPOINTMENTS.
NEW SOUTH WALES: Honorary Secretary, 21, Elizabeth Street, Sydney.	Australian Natives' Association. Ashfield and District United Friendly Societies' Dispensary. Balmalm United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham United Friendly Societies' Dispensary. Manchester Unity Medical and Dispensing Institute, Oxford Street, Sydney. North Sydney Friendly Societies' Dispensary Limited. People's Prudential Assurance Company, Limited. Phoenix Mutual Provident Society.
VICTORIAN: Honorary Secretary, Medical Society Hall, East Melbourne.	All Institutes or Medical Dispensaries. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association. Hospital or other appointments outside Victoria.
QUEENSLAND: Honorary Secretary, B.M.A. Building, Adelaide Street, Brisbane.	Members accepting appointments as medical officers of country hospitals in Queensland are advised to submit a copy of their agreement to the Council before signing. Brisbane United Friendly Society Institute. Mount Isa Hospital.
SOUTH AUSTRALIAN: Secretary, 207, North Terrace, Adelaide.	All Lodge Appointments in South Australia. All Contract Practice Appointments in South Australia.
WESTERN AUSTRALIAN: Honorary Secretary, 65, Saint George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.
NEW ZEALAND (Wellington Division): Honorary Secretary, Wellington.	Friendly Society Lodges, Wellington, New Zealand.

Medical practitioners are requested not to apply for appointments to positions at the Hobart General Hospital, Tasmania, without first having communicated with the Editor of THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales.

Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

All communications should be addressed to "The Editor," THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales. (Telephones: MW 2651-2.)

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